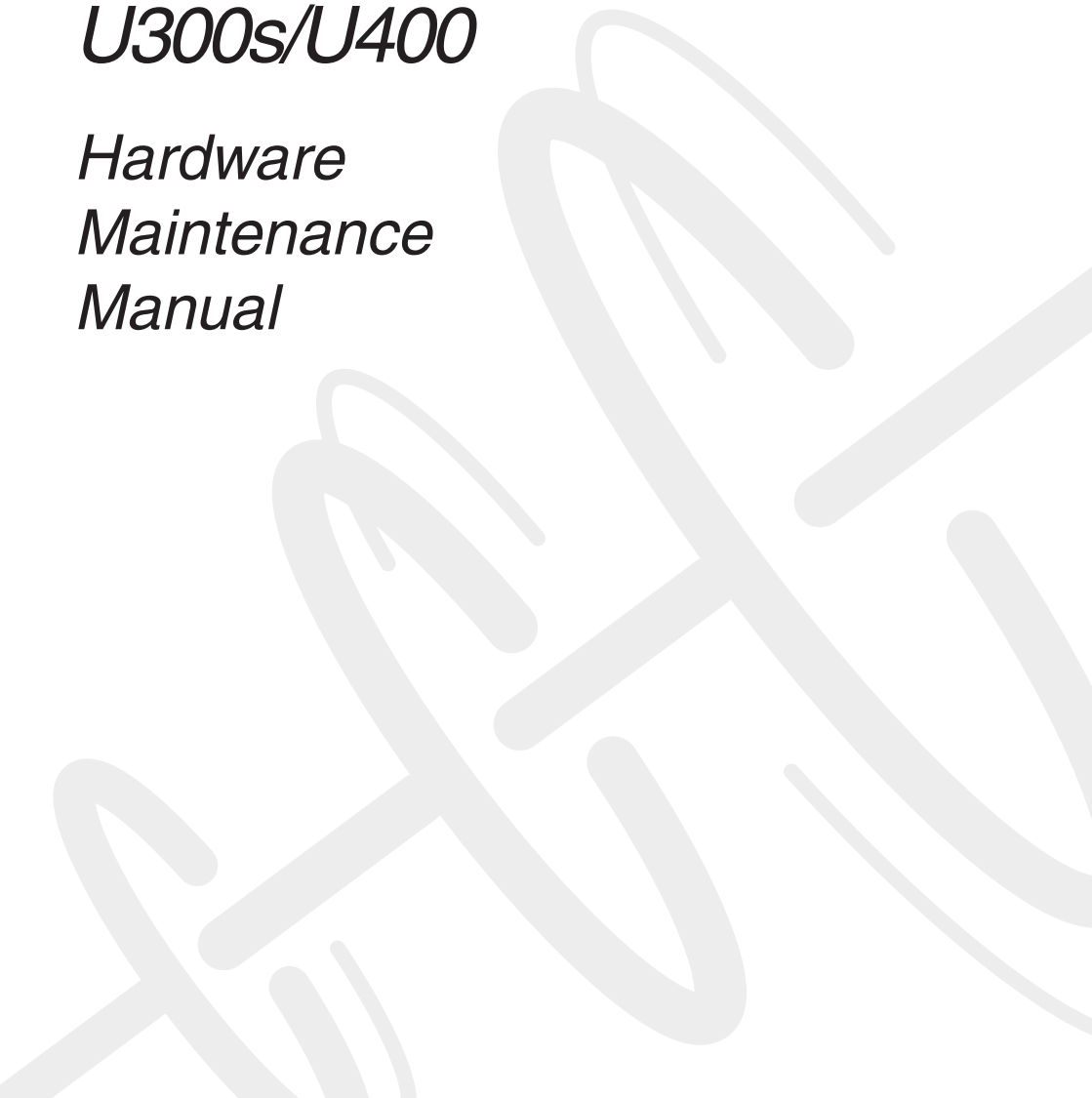
Lenovo IdeaPad U300/ U300s/U400

Hardware Maintenance Manual

Note:

Before using this information and the product it supports, be sure to read the general information under “Notices” on page 127.

First Edition (Oct. 2011)

Contents

About this manual

This manual contains service and reference information for the following Lenovo IdeaPad product:

Lenovo IdeaPad U300/U300s/U400

Use this manual to troubleshoot problems.

The manual is divided into the following sections:

- The common sections provide general information, guidelines, and safety information required for servicing computers.
- The product-specific section includes service, reference, and product-specific parts information.

Important:

This manual is intended only for trained servicers who are familiar with Lenovo IdeaPad products. Use this manual to troubleshoot problems effectively.

Before servicing a Lenovo IdeaPad product, make sure to read all the information under “Safety information” on page 1 and “Important service information” on page 16.

Safety information

This chapter presents the following safety information that you need to get familiar with before you service an Lenovo IdeaPad U300/U300s/U400 computer:

General safety

Follow these rules below to ensure general safety:

- Observe a good housekeeping in the area where the machines are put during and after the maintenance.
- When lifting any heavy object:
  1. Make sure that you can stand safely without slipping.
  2. Distribute the weight of the object equally between your feet.
  3. Use a slow lifting force. Never move suddenly or twist when you attempt to lift it.
  4. Lift it by standing or pushing up with your leg muscles; this action could avoid the strain from the muscles in your back. Do not attempt to lift any object that weighs more than 16 kg (35 lb) or that you think is too heavy for you.
- Do not perform any action that causes hazards to the customer, or that makes the machine unsafe.
- Before you start the machine, make sure that other service representatives and the customer are not in a hazardous position.
- Place removed covers and other parts in a safe place, keeping them away from all personnel, while you are servicing the machine.
- Keep your toolcase away from walk areas so that other people will not trip it over.
- Do not wear loose clothing that can be trapped in the moving parts of the machine. Make sure that your sleeves are fastened or rolled up above your elbows. If your hair is long, fasten it.
- Insert the ends of your necktie or scarf inside clothing or fasten it with the nonconductive clip, about 8 centimeters (3 inches) from the end.
- Do not wear jewelry, chains, metal-frame eyeglasses, or metal fasteners for your clothing.

  Attention: Metal objects are good electrical conductors.
- Wear safety glasses when you are hammering, drilling, soldering, cutting wire, attaching springs, using solvents, or working in any other conditions that may be hazardous to your eyes.
- After service, reinstall all safety shields, guards, labels, and ground wires. Replace any safety device that is worn or defective.
- Reinstall all covers correctly before returning the machine to the customer.
- Fan louvers on the machine help to prevent the overheating of internal components. Do not obstruct fan louvers or cover them with labels or stickers.

Electrical safety

Observe the following rules when working on electrical equipments.

Important:

Use only approved tools and test equipments. Some hand tools have handles covered with a soft material that does not insulate you when working with live electrical currents.

Many customers have rubber floor mats near their machines that contain small conductive fibers to decrease electrostatic discharges. Do not use such kind of mat to protect yourself from electrical shock.

- Find the room emergency power-off (EPO) switch, disconnecting the switch or electrical outlet. If an electrical accident occurs, you can then operate the switch or unplug the power cord quickly.
- Do not work alone under hazardous conditions or near the equipment that has hazardous voltages.
- Disconnect all power before:
  - Performing a mechanical inspection
  - Working near power supplies
  - Removing or installing main units
- Before you start to work on the machine, unplug the power cord. If you cannot unplug it, ask the customer to power-off the wall box that supplies power to the machine, and to lock the wall box in the off position.
- If you need to work on a machine that has exposed electrical circuits, observe the following precautions:
  - Ensure that another person, familiar with the power-off controls, is near you.

    Attention: Another person must be there to switch off the power, if necessary.
  - Use only one hand when working with powered-on electrical equipment; keep the other hand in your pocket or behind your back.

    Attention: An electrical shock can occur only when there is a complete circuit. By observing the above rule, you may prevent a current from passing through your body.
  - When using testers, set the controls correctly and use the approved probe leads and accessories for that tester.
  - Stand on suitable rubber mats (obtained locally, if necessary) to insulate you from grounds such as metal floor strips and machine frames.

Observe the special safety precautions when you work with very high voltages; instructions for these precautions are in the safety sections of maintenance information. Be extremely careful when you measure the high voltages.

- Regularly inspect and maintain your electrical hand tools for safe operational condition.
- Do not use worn or broken tools and testers.
- Never assume that power has been disconnected from a circuit. First, check it to make sure that it has been powered off.

- Always look carefully for possible hazards in your work area. Examples of these hazards are moist floors, nongrounded power extension cables, power surges, and missing safety grounds.
- Do not touch live electrical circuits with the reflective surface of a plastic dental mirror. The surface is conductive; such touching can cause personal injury and machine damage.
- Do not service the following parts with the power on when they are removed from their normal operating places in a machine:
  - Power supply units
  - Pumps
  - Blowers and fans
  - Motor generators

  and similar units. (This practice ensures correct grounding of the units.)
- If an electrical accident occurs:
  - Caution: do not become a victim yourself.
  - Switch off the power.
  - Send the victim to get medical aid.

Safety inspection guide

The purpose of this inspection guide is to assist you in identifying potential unsafe conditions. As each machine was designed and built, required safety items were installed to protect users and service personnel from injury. This guide addresses only those items. You should use good judgment to identify potential safety hazards according to the attachment of non-Lenovo IdeaPad features or options not covered by this inspection guide.

If any unsafe conditions are present, you must determine how serious the apparent hazard could be and whether you can continue without first correcting the problem.

Consider these conditions and the safety hazards they present:

- Electrical hazards, especially primary power (primary voltage on the frame can cause serious or fatal electrical shock)
- Explosive hazards, such as a damaged CRT face or a bulging capacitor
- Mechanical hazards, such as loose or missing hardware

To determine whether there are any potential unsafe conditions, use the following checklist at the beginning of every service task. Begin the checks with the power off, and the power cord disconnected.

Checklist:

1. Check exterior covers for damage (loose, broken, or sharp edges).
2. Turn off the computer. Disconnect the power cord.
3. Check the power cord for:
   a. A third-wire ground connector in good condition. Use a meter to measure third-wire ground continuity for 0.1 ohm or less between the external ground pin and the frame ground.
   b. The power cord should be the type specified in the parts list.
   c. Insulation must not be frayed or worn.
4. Check for cracked or bulging batteries.
5. Remove the cover.
6. Check for any obvious non-Lenovo IdeaPad alterations. Use good judgment as to the safety of any non-Lenovo IdeaPad alterations.
7. Check inside the unit for any obvious unsafe conditions, such as metal filings, contamination, water or other liquids, or signs of fire or smoke damage.
8. Check for worn, frayed, or pinched cables.
9. Check that the power-supply cover fasteners (screws or rivets) have not been removed or tampered with.

Handling devices that are sensitive to electrostatic discharge

Any computer part containing transistors or integrated circuits (ICs) should be considered sensitive to electrostatic discharge (ESD). ESD damage can occur when there is a difference in charge between objects. Protect against ESD damage by equalizing the charge so that the machine, the part, the work mat, and the person handling the part are all at the same charge.

Notes:

1. Use product-specific ESD procedures when they exceed the requirements noted here.
2. Make sure that the ESD protective devices you use have been certified (ISO 9000) as fully effective.

When handling ESD-sensitive parts:

- Keep the parts in protective packages until they are inserted into the product.
- Avoid contact with other people.
- Wear a grounded wrist strap against your skin to eliminate static on your body.
- Prevent the part from touching your clothing. Most clothing is insulative and retains a charge even when you are wearing a wrist strap.
- Use the black side of a grounded work mat to provide a static-free work surface. The mat is especially useful when handling ESD-sensitive devices.
- Select a grounding system, such as those listed below, to provide protection that meets the specific service requirement.

Note:

The use of a grounding system to guard against ESD damage is desirable but not necessary.

- – Attach the ESD ground clip to any frame ground, ground braid, or green-wire ground.
- – When working on a double-insulated or battery-operated system, use an ESD common ground or reference point. You can use coax or connector-outside shells on these systems.
- – Use the round ground prong of the ac plug on ac-operated computers.

Grounding requirements

Electrical grounding of the computer is required for operator safety and correct system function. Proper grounding of the electrical outlet can be verified by a certified electrician.

Safety notices: multilingual translations

The safety notices in this section are provided in English, French, German, Hebrew, Italian, Japanese, and Spanish.

Safety notice 1

Before the computer is powered on after FRU replacement, make sure all screws, springs, and other small parts are in place and are not left loose inside the computer. Verify this by shaking the computer and listening for rattling sounds. Metallic parts or metal flakes can cause electrical shorts.

Avant de remettre l’ordinateur sous tension après remplacement d’une unité en clientèle, vérifiez que tous les ressorts, vis et autres pièces sont bien en place et bien fixées. Pour ce faire, secouez l’unité et assurez-vous qu’aucun bruit suspect ne se produit. Des pièces métalliques ou des copeaux de métal pourraient causer un court-circuit.

Bevor nach einem FRU-Austausch der Computer wieder angeschlossen wird, muß sichergestellt werden, daß keine Schrauben, Federn oder andere Kleinteile fehlen oder im Gehäuse vergessen wurden. Der Computer muß geschüttelt und auf Klappergeräusche geprüft werden. Metallteile oder-splitter können Kurzschlüsse erzeugen.

לפני הפעלת המחשב לאחר החלפת FRU יש לוודא
שכל הברגים, הקפיצים, וחלקים קטנים אחרים נמצאים
במקומם ואינם חופשיים לזוז בתוך המחשב. כדי לוודא
זאת, יש לטלטל את המחשב ולהקשיב לגילוי קולות שקשוק.
חלקי או שבבי מתכת עלולים לגרום לקצרים חשמליים.

Prima di accendere l’elaboratore dopo che é stata effettuata la sostituzione di una FRU, accertarsi che tutte le viti, le molle e tutte le altri parti di piccole dimensioni siano nella corretta posizione e non siano sparse all’interno dell’elaboratore. Verificare ciò scuotendo l’elaboratore e prestando attenzione ad eventuali rumori; eventuali parti o pezzetti metallici possono provocare cortocircuiti pericolosi.

FRU の交換後、コンピュータの電源を入れる前に、ねじ、バネ、その他の小さな部品がすべて正しい位置にあり、またコンピュータの内部で緩んでいないことを確認してください。
これを確認するには、コンピュータを振って、カチャカチャと音がしないか確かめます。金属部品や金属破片はショートの原因になることがあります。

Antes de encender el sistema despues de sustituir una FRU, compruebe que todos los tornillos, muelles y demás piezas pequeñas se encuentran en su sitio y no se encuentran sueltas dentro del sistema. Compruébelo agitando el sistema y escuchando los posibles ruidos que provocarían. Las piezas metálicas pueden causar cortocircuitos eléctricos.

Safety notice 2

⚠ DANGER

Some standby batteries contain a small amount of nickel and cadmium. Do not disassemble a standby battery, recharge it, throw it into fire or water, or short-circuit it. Dispose of the battery as required by local ordinances or regulations. Use only the battery in the appropriate parts listing. Use of an incorrect battery can result in ignition or explosion of the battery.

Certaines batteries de secours contiennent du nickel et du cadmium. Ne les démontez pas, ne les rechargez pas, ne les exposez ni au feu ni à l’eau. Ne les mettez pas en court-circuit. Pour les mettre au rebut, conformez-vous à la réglementation en vigueur. Lorsque vous remplacez la pile de sauvegarde ou celle de l’horloge temps réel, veillez à n’utiliser que les modèles cités dans la liste de pièces détachées adéquate. Une batterie ou une pile inappropriée risque de prendre feu ou d’exploser.

Die Bereitschaftsbatterie, die sich unter dem Diskettenlaufwerk befindet, kann geringe Mengen Nickel und Cadmium enthalten. Sie darf nicht zerlegt, wiederaufgeladen, kurzgeschlossen, oder Feuer oder Wasser ausgesetzt werden. Bei der Entsorgung die örtlichen Bestimmungen für Sondermüll beachten. Beim Ersetzen der Bereitschafts-oder Systembatterie nur Batterien des Typs verwenden, der in der Ersatzteilliste aufgeführt ist. Der Einsatz falscher Batterien kann zu Entzündung oder Explosion führen.

סוללות המתנה מסוימות מכילות כמות קטנה של ניקל וקדמיום. אין לפרק סוללת המתנה, לטעון אותה מחדש, להשליך אותה לאש או למים או לקצר אותה. יש לסלק את הסוללה כנדרש על ידי התקנות והחוקים המקומיים. יש להשתמש רק בסוללה המופיעה ברשימת החלקים המתאימה. שימוש בסוללה לא מתאימה עלול לגרום להצתה או התפוצצות של הסוללה.

Alcune batterie di riserva contengono una piccola quantità di nichel e cadmio. Non smontarle, ricaricarle, gettarle nel fuoco o nell’acqua né cortocircuitarle. Smaltirle secondo la normativa in vigore (DPR 915/82, successive disposizioni e disposizioni locali). Quando si sostituisce la batteria dell’RTC (real time clock) o la batteria di supporto, utilizzare soltanto i tipi inseriti nell’appropriato Catalogo parti. L’impiego di una batteria non adatta potrebbe determinare l’incendio o l’esplosione della batteria stessa.

予備バッテリーの中には少量のニッケルとカドミウムが含まれているものがあります。したがって、予備バッテリーの分解、再充電、火または水の中への投棄、またはショートさせることは決して行わないでください。バッテリーを廃棄する場合は地方自治体の条例に従ってください。適切なパーツ・リストにあるバッテリーだけを使用してください。誤ったバッテリーを使用すると、バッテリーが発火したり、爆発したりすることがあります。

Algunas baterías de reserva contienen una pequeña cantidad de níquel y cadmio. No las desmonte, ni recargue, ni las eche al fuego o al agua ni las cortocircuite. Deséchelas tal como dispone la normativa local. Utilice sólo baterías que se encuentren en la lista de piezas. La utilización de una batería no apropiada puede provocar la ignición o explosión de la misma.

Safety notice 3

⚠ DANGER

The battery pack contains small amounts of nickel. Do not disassemble it, throw it into fire or water, or short-circuit it. Dispose of the battery pack as required by local ordinances or regulations. Use only the battery in the appropriate parts listing when replacing the battery pack. Use of an incorrect battery can result in ignition or explosion of the battery.

La batterie contient du nickel. Ne la démontez pas, ne l'exposez ni au feu ni à l'eau. Ne la mettez pas en court-circuit. Pour la mettre au rebut, conformez-vous à la réglementation en vigueur. Lorsque vous remplacez la batterie, veillez à n'utiliser que les modèles cités dans la liste de pièces détachées adéquate. En effet, une batterie inappropriée risque de prendre feu ou d'exploser.

Akkus enthalten geringe Mengen von Nickel. Sie dürfen nicht zerlegt, wiederaufgeladen, kurzgeschlossen, oder Feuer oder Wasser ausgesetzt werden. Bei der Entsorgung die örtlichen Bestimmungen für Sondermüll beachten. Beim Ersetzen der Batterie nur Batterien des Typs verwenden, der in der Ersatzteilliste aufgeführt ist. Der Einsatz falscher Batterien kann zu Entzündung oder Explosion führen.

מארז הסוללה מכיל כמות קטנה של ניקל
וקדמיום. אין לפרק את מארז הסוללה, להשליך
אותו לאש או למים או לקצר אותו. יש לסלק את
מארז הסוללה הסוללה כנדרש על ידי התקנות
והחוקים המקומיים. יש להשתמש רק בסוללה
המופיעה ברשימת החלקים המתאימה בזמן החלפת
מארז הסוללה. שימוש בסוללה לא מתאימה עלול
לגרום להצתה או התפוצצות של הסוללה.

La batteria contiene piccole quantità di nichel. Non smontarla, gettarla nel fuoco o nell'acqua né cortocircuitarla. Smaltirla secondo la normativa in vigore (DPR 915/82, successive disposizioni e disposizioni locali). Quando si sostituisce la batteria, utilizzare soltanto i tipi inseriti nell'appropriato Catalogo parti. L'impiego di una batteria non adatta potrebbe determinare l'incendio o l'esplosione della batteria stessa.

バッテリー・パックには少量のニッケルが含まれています。バッテリー・パックを分解したり、火または水の中に投げ込んだり、ショートさせないでください。バッテリー・パックの廃棄にあたっては、地方自治体の条例または規則に従ってください。バッテリー・パックを交換するときは、適切なパーツ・リストにあるバッテリーだけを使用してください。誤ったバッテリーを使用すると、バッテリーが発火したり、爆発したりすることがあります。

Las baterías contienen pequeñas cantidades de níquel. No las desmonte, ni recargue, ni las eche al fuego o al agua ni las cortocircuite. Deséchelas tal como dispone la normativa local. Utilice sólo baterías que se encuentren en la lista de piezas al sustituir la batería. La utilización de una batería no apropiada puede provocar la ignición o explosión de la misma.

Safety notice 4

⚠ DANGER

The lithium battery can cause a fire, an explosion, or a severe burn. Do not recharge it, remove its polarized connector, disassemble it, heat it above 100°C (212°F), incinerate it, or expose its cell contents to water. Dispose of the battery as required by local ordinances or regulations. Use only the battery in the appropriate parts listing. Use of an incorrect battery can result in ignition or explosion of the battery.

La pile de sauvegarde contient du lithium. Elle présente des risques d'incendie, d'explosion ou de brûlures graves. Ne la rechargez pas, ne retirez pas son connecteur polarisé et ne la démontez pas. Ne l'exposez pas à une temperature supérieure à 100°C, ne la faites pas brûler et n'en exposez pas le contenu à l'eau. Mettez la pile au rebut conformément à la réglementation en vigueur. Une pile inappropriée risque de prendre feu ou d'exploser.

Die Systembatterie ist eine Lithiumbatterie. Sie kann sich entzünden, explodieren oder schwere Verbrennungen hervorrufen. Batterien dieses Typs dürfen nicht aufgeladen, zerlegt, über 100 C erhitzt oder verbrannt werden. Auch darf ihr Inhalt nicht mit Wasser in Verbindung gebracht oder der zur richtigen Polung angebrachte Verbindungsstecker entfernt werden. Bei der Entsorgung die örtlichen Bestimmungen für Sondermüll beachten. Beim Ersetzen der Batterie nur Batterien des Typs verwenden, der in der Ersatzteilliste aufgeführt ist. Der Einsatz falscher Batterien kann zu Entzündung oder Explosion führen.

סוללת הליתיום עלולה לגרום לשריפה, להתפוצצות או לכוויות קשות. אין לטעון אותה מחדש, לסלק את המחבר המקוטב שלה, לפרק אותה או לחמם אותה לטמפרטורה העולה על 100 מעלות צלזיוס. אין לשרוף את הסוללה ואין לחשוף את תוכן התא למים. יש לסלק את הסוללה כנדרש בתקנות ובחוקים המקומיים. יש להשתמש רק בסוללה המופיעה ברשימת החלקים המתאימים. שימוש בסוללה אחרת עלול לגרום לסכנת שריפה או התפוצצות.

La batteria di supporto e una batteria al litio e puo incendiarsi, esplodere o procurare gravi ustioni. Evitare di ricaricarla, smontarne il connettore polarizzato, smontarla, riscaldarla ad una temperatura superiore ai 100 gradi centigradi, incendiarla o gettarla in acqua. Smaltirla secondo la normativa in vigore (DPR 915/82, successive disposizioni e disposizioni locali). L'impiego di una batteria non adatta potrebbe determinare l'incendio o l'esplosione della batteria stessa.

リチウム・バッテリーは、火災、爆発、または重症のやけどを引き起こすことがあります。バックアップ・バッテリーの充電、その極性コネクターの取り外し、バッテリー本体の分解、
100 ℃ (212 ˚F) 以上への加熱、焼却、電池の中身を水に浸すことはしないでください。バッテリーを廃棄する場合は地方自治体の条例に従ってください。適切なパーツ・リストにあるバッテリーだけを使用してください。誤ったバッテリーを使用すると、バッテリーが発火したり、爆発したりすることがあります。

La batería de repuesto es una batería de litio y puede provocar incendios, explosiones o quemaduras graves. No la recargue, ni quite el conector polarizado, ni la desmonte, ni caliente por encima de los 100°C (212°F), ni la incinere ni exponga el contenido de sus celdas al agua. Deséchela tal como dispone la normativa local.

Safety notice 5

If the LCD breaks and the fluid from inside the LCD gets into your eyes or on your hands, immediately wash the affected areas with water at least for 15 minutes. Seek medical care if any symptoms caused by the fluid are present after washing.

Si le panneau d’affichage à cristaux liquides se brise et que vous recevez dans les yeux ou sur les mains une partie du fluide, rincez-les abondamment pendant au moins quinze minutes. Consultez un médecin si des symptômes persistent après le lavage.

Die Leuchtstoffröhre im LCD-Bildschirm enthält Quecksilber. Bei der Entsorgung die örtlichen Bestimmungen für Sondermüll beachten. Der LCD-Bildschirm besteht aus Glas und kann zerbrechen, wenn er unsachgemäß behandelt wird oder der Computer auf den Boden fällt. Wenn der Bildschirm beschädigt ist und die darin befindliche Flüssigkeit in Kontakt mit Haut und Augen gerät, sollten die betroffenen Stellen mindestens 15 Minuten mit Wasser abgespült und bei Beschwerden anschließend ein Arzt aufgesucht werden.

אם מסך הגביש הנוזלי (LCD) נשבר והנוזל מתוך המסך בא במגע עם עיניכם או ידיכם, שטפו את האזורים הנגועים מיד במים במשך 15 דקות לפחות. פנו לקבלת עזרה רפואית אם תסמינים הנובעים מהמגע עם הנוזל נמשכים לאחר השטיפה.

Nel caso che caso l’LCD si dovesse rompere ed il liquido in esso contenuto entrasse in contatto con gli occhi o le mani, lavare immediatamente le parti interessate con acqua corrente per almeno 15 minuti; poi consultare un medico se i sintomi dovessero permanere.

LCD が破損し、 LCD の中の液体が目に入ったり、手に触れたりした場合は、液体が触れた部分を少なくとも 15 分間洗い流してください。洗い流した後に、液体によって何らかの症状が現れた場合は、医師の治療を受けてください。

Si la LCD se rompe y el fluido de su interior entra en contacto con sus ojos o sus manos, lave inmediatamente las áreas afectadas con agua durante 15 minutos como mínimo. Obtenga atención medica si se presenta algún síntoma del fluido despues de lavarse.

Safety notice 6

⚠ DANGER

To avoid shock, do not remove the plastic cover that protects the lower part of the inverter card.

Afin d’éviter tout risque de choc électrique, ne retirez pas le cache en plastique protégeant la partie inférieure de la carte d’alimentation.

Aus Sicherheitsgründen die Kunststoffabdeckung, die den unteren Teil der Spannungswandlerplatine umgibt, nicht entfernen.

כדי למנוע התחשמלות, אין להסיר את מכסה הפלסטיק המגן על חלקו התחתון של הכרטיס ההפוך.

Per evitare scosse elettriche, non rimuovere la copertura in plastica che avvolge la parte inferiore della scheda invertitore.

感電を防ぐため、インバーター・カードの下部を保護しているプラスチック・カバーを外さないでください。

Para evitar descargas, no quite la cubierta de plástico que rodea la parte baja de la tarjeta invertida.

Safety notice 7

⚠ DANGER

Though the main batteries have low voltage, a shorted or grounded battery can produce enough current to burn personnel or combustible materials.

Bien que le voltage des batteries principales soit peu élevé, le court-circuit ou la mise à la masse d’une batterie peut produire suffisamment de courant pour brûler des matériaux combustibles ou causer des brûlures corporelles graves.

Obwohl Hauptbatterien eine niedrige Spannung haben, können sie doch bei Kurzschluß oder Erdung genug Strom abgeben, um brennbare Materialien zu entzünden oder Verletzungen bei Personen hervorzurufen.

אף שהסוללות הראשיות הן בעלות מתח נמוך, סוללה מקוצרת או מוארקת עלולה להפיק זרם מספיק לגרימת כוויות או להצתת חומרים דליקים.

Sebbene le batterie di alimentazione siano a basso voltaggio, una batteria in corto circuito o a massa può fornire corrente sufficiente da bruciare materiali combustibili o provocare ustioni ai tecnici di manutenzione.

メイン・バッテリーの電圧は低くても、ショートしたり、接地したバッテリーが、作業者にやけどを負わせたり、可燃物を燃やすだけの電流を発生させる場合があります。

Aunque las baterías principales tienen un voltaje bajo, una batería cortocircuitada o con contacto a tierra puede producir la corriente suficiente como para quemar material combustible o provocar quemaduras en el personal.

Safety notice 8

⚠ DANGER

Before removing any FRU, turn off the computer, unplug all power cords from electrical outlets, remove the battery pack, and then disconnect any interconnecting cables.

Avant de retirer une unité remplaçable en clientèle, mettez le système hors tension, débranchez tous les cordons d’alimentation des socles de prise de courant, retirez la batterie et déconnectez tous les cordons d’interface.

Die Stromzufuhr muß abgeschaltet, alle Stromkabel aus der Steckdose gezogen, der Akku entfernt und alle Verbindungskabel abgenommen sein, bevor eine FRU entfernt wird.

לפני סילוק FRU כלשהו, יש לכבות את המחשב, לנתק את כל כבלי החשמל משקעי החשמל, להוציא את מארז הסוללה, ואז לנתק כבלי חיבור אחרים אם יש כאלה.

Prima di rimuovere qualsiasi FRU, spegnere il sistema, scollegare dalle prese elettriche tutti i cavi di alimentazione, rimuovere la batteria e poi scollegare i cavi di interconnessione.

FRU を取り外す前に、 ThinkPad の電源を切って、すべての電源コードをコンセントから外してください。次に、バッテリー・パックを外し、相互接続ケーブルを外してください。

Antes de quitar una FRU, apague el sistema, desenchufe todos los cables de las tomas de corriente eléctrica, quite la batería y, a continuación, desconecte cualquier cable de conexión entre dispositivos.

Laser compliance statement

Some models of Lenovo IdeaPad computer are equipped from the factory with an optical storage device such as a CD-ROM drive or a DVD-ROM drive. Such devices are also sold separately as options. If one of these drives is installed, it is certified in the U.S. to conform to the requirements of the Department of Health and Human Services 21 Code of Federal Regulations (DHHS 21 CFR) Subchapter J for Class 1 laser products. Elsewhere, the drive is certified to conform to the requirements of the International Electrotechnical Commission (IEC) 825 and CENELEC EN 60 825 for Class 1 laser products.

If a CD-ROM drive, a DVD-ROM drive, or another laser device is installed, note the following:

⚠ **CAUTION**

Use of controls or adjustments or performance of procedures other than those specified herein might result in hazardous radiation exposure.

O uso de controles, ajustes ou desempenho de procedimentos diferentes daqueles aqui especificados pode resultar em perigosa exposição à radiação.

凡未在这里指明的任何控制用法、调整、行为，
都会导致严重后果。

Pour éviter tout risque d’exposition au rayon laser, respectez les consignes de réglage et d’utilisation des commandes, ainsi que les procédures décrites.

Werden Steuer- und Einstellelemente anders als hier festgesetzt verwendet, kann gefährliche Laserstrahlung auftreten.

Az itt előírt eljárásoktól, beállításoktól és vezérlésektől
eltérni a lézersugárzás veszélye miatt kockázatos !

L’utilizzo di controlli, regolazioni o l’esecuzione di procedure diverse da quelle specificate possono provocare l’esposizione a.

Использование элементов настройки и
выполнение процедур иных, чем указано
здесь, может привести к опасному
радиационному облучению.

Použitie kontrôl, úprav alebo iných vykonaní od iných
výrobcov, ako je v tomto špecifikované, mohlo by mať
za následok nebezpečenstvo vystavenia sa vyžiarovaniu.

本書で指定された内容以外の、お客様による整備、調整、または手順を行っ
た場合、レーザー光の放射の危険があります。

El uso de controles o ajustes o la ejecución de procedimientos distintos de los aquí especificados puede provocar la exposición a radiaciones peligrosas.

Opening the CD-ROM drive, the DVD-ROM drive, or any other optical storage device could result in exposure to hazardous laser radiation. There are no serviceable parts inside those drives. **Do not open**.

A CD-ROM drive, a DVD-ROM drive, or any other storage device installed may contain an embedded Class 3A or Class 3B laser diode. Note the following:

⚠ DANGER

Emits visible and invisible laser radiation when open. Do not stare into the beam, do not view directly with optical instruments, and avoid direct exposure to the beam.

Radiação por raio laser ao abrir. Não olhe fixo no feixe de luz, não olhe diretamente por meio de instrumentos óticos e evite exposição direta com o feixe de luz.

开启时会有激光发射时，请勿盯视激光光束，请勿直接查看
视觉仪器，并且避免直接接触在激光光束之中。

Rayonnement laser si carter ouvert. Évitez de fixer le faisceau, de le regarder directement avec des instruments optiques, ou de vous exposer au rayon.

Laserstrahlung bei geöffnetem Gerät. Nicht direkt oder über optische Instrumente in den Laserstrahl sehen und den Strahlungsbereich meiden.

Kinyitáskor lézersugár ! Ne nézzen bele se szabad szemmel, se optikai eszközökkel. Kerülje a sugárnyalábbal való érintkezést!

Aprendo l'unità vengono emesse radiazioni laser. Non fissare il fascio, non guardarlo direttamente con strumenti ottici e evitare l'esposizione diretta al fascio.

Открывая, берегитесь лазерного излучения.
Не смотрите на луч, не разглядывайте его
с помощью оптических инструментов, а также
избегайте прямого воздействия лазерного луча.

Keď je laserová jednotka otvorená. Vyhnite sa priamemu
pohľadu a nehľadte priamo s optickými nástrojmi do ľúča
a vyhnite sa priamemu vystaveniu ľúčov.

開けるとレーザー光が放射されます。光線を見つめたり、光学機械を使って直接見たりしないでください。

Radiación láser al abrir. No mire fijamente ni examine con instrumental óptico el haz de luz. Evite la exposición directa al haz.

Important service information

This chapter presents the following important service information:

- "Strategy for replacing FRUs" on page 16
  - "Strategy for replacing a hard disk drive" on page 17
  - "Important notice for replacing a system board " on page 17
- "Important information about replacing RoHS compliant FRUs" on page 18

Important:

BIOS and device driver fixes are customer-installable. The BIOS and device drivers are posted on the customer support site: http://consumersupport.lenovo.com/.

Strategy for replacing FRUs

Before replacing parts:

Make sure that all software fixes, drivers, and BIOS downloads are installed before replacing any FRUs listed in this manual.

After a system board is replaced, ensure that the latest BIOS is loaded to the system board before completing the service action.

To download software fixes, drivers, and BIOS, follow the steps below:

1. Go to http://consumersupport.lenovo.com/.
2. Enter a serial number or select a product or use Lenovo smart downloading.
3. Select the BIOS/Driver/Applications and download.
4. Follow the directions on the screen and install the necessary software.

Use the following strategy to prevent unnecessary expense for replacing and servicing FRUs:

- If you are instructed to replace an FRU, but the replacement does not solve the problem, reinstall the original FRU before you continue.
- Some computers have both a processor board and a system board. If you are instructed to replace either of them, and replacing one of them does not solve the problem, reinstall that board, and then replace the other one.
- If an adapter or a device consists of more than one FRU, any of the FRUs may be the cause of the error. Before replacing the adapter or device, remove the FRUs one by one to see if the symptoms change. Replace only the FRU that changed the symptoms.

Attention: The setup configuration on the computer you are servicing may have been customized. Running Automatic Configuration may alter the settings. Note the current configuration settings (using the View Configuration option); then, when service has been completed, verify that those settings remain in effect.

Strategy for replacing a hard disk drive

Always try to run a low-level format before replacing a hard disk drive. This will cause all customer data on the hard disk to be lost. Make sure that the customer has a current backup of the data before performing this action.

Attention: The drive startup sequence in the computer you are servicing may have been changed. Be extremely careful during write operations such as copying, saving, or formatting. If you select an incorrect drive, data or programs can be overwritten.

Important notice for replacing a system board

Some components mounted on a system board are very sensitive. Improper handling can cause damage to those components, and may cause a system malfunction.

Attention: When handling a system board:

- Do not drop the system board or apply any excessive force to it.
- Avoid rough handling of any kind.
- Avoid bending the system board and hard pushing to prevent cracking at each BGA (Ball Grid Array) chipset.

Important information about replacing RoHS compliant FRUs

RoHS, The Restriction of Hazardous Substances in Electrical and Electronic Equipment Directive (2002/95/EC) is a European Union legal requirement affecting the global electronics industry. RoHS requirements must be implemented on Lenovo products placed on the market after June 2006. Products on the market before June 2006 are not required to have RoHS compliant parts. If the original FRU parts are non-compliant, replacement parts can also be non-compliant. In all cases if the original FRU parts are RoHS compliant, the replacement part must also be RoHS compliant.

Note: RoHS and non-RoHS FRU part numbers with the same fit and function are identified with unique FRU part numbers.

Lenovo plans to transit to RoHS compliance well before the implementation date and expects its suppliers to be ready to support Lenovo's requirements and schedule in the EU. Products sold in 2005 and 2006 will contain some RoHS compliant FRUs. The following statement pertains to these products and any product Lenovo produces containing RoHS compliant FRUs.

RoHS compliant FRUs have unique FRU part numbers. Before or after the RoHS implementation date, failed RoHS compliant parts must always be replaced with RoHS compliant ones, so only the FRUs identified as compliant in the system HMM or direct substitutions for those FRUs may be used.

Products marketed before June 2006		Products marketed after June 2006	
Current or original part	**Replacement FRU**	**Current or original part**	**Replacement FRU**
Non-RoHS	Can be Non-RoHS	Must be RoHS	Must be RoHS
Non-RoHS	Can be RoHS		
Non-RoHS	Can sub to RoHS		
RoHS	Must be RoHS		

Note: A direct substitution is a part with a different FRU part number that is automatically shipped by the distribution center at the time of the order.

General checkout

This chapter presents the following information:

- "What to do first" on page 20
- "Power system checkout" on page 21

Before you go to the checkout, make sure to read the following important notes:

Important notes:

- **Only certified trained personnel can service the computer.**
- **Before replacing any FRU, read the entire page on removing and replacing FRUs.**
- **When you replace FRUs, use new nylon-coated screws.**
- **Be extremely careful during such write operations as copying, saving, or formatting.** Drives in the computer that you are servicing sequence might have been altered. If you select an incorrect drive, data or programs might be overwritten.
- **Replace an FRU only with another FRU of the correct model.** When you replace an FRU, make sure that the machine model and the FRU part number are correct by referring to the FRU parts list.
- **An FRU should not be replaced just because of a single, unreproducible failure.** Single failures can occur for a variety of reasons that have nothing to do with a hardware defect, such as cosmic radiation, electrostatic discharge, or software errors. Consider replacing an FRU only when a problem recurs. If you suspect that an FRU is defective, clear the error logs and run the test again. If the error does not recur, do not replace the FRU.
- **Be careful not to replace a nondefective FRU.**

What to do first

When you do return an FRU, you must include the following information in the parts exchange form or parts return form that you attach to it:

1. Name and phone number of servicer
2. Date of service
3. Date on which the machine failed
4. Date of purchase
5. Procedure index and page number in which the failing FRU was detected
6. Failing FRU name and part number
7. Machine type, model number, and serial number
8. Customer's name and address

Note for warranty: During the warranty period, the customer may be responsible for repair costs if the computer damage was caused by misuse, accident, modification, unsuitable physical or operating environment, or improper maintenance by the customer.

The following is a list of some common items that are not covered under warranty and some symptoms that might indicate that the system was subjected to stress beyond normal use.

Before checking problems with the computer, determine whether the damage is covered under the warranty by referring to the following list:

The following are not covered under warranty:

- LCD panel cracked from the application of excessive force or from being dropped
- Scratched (cosmetic) parts
- Distortion, deformation, or discoloration of the cosmetic parts
- Plastic parts, latches, pins, or connectors that have been cracked or broken by excessive force
- Damage caused by liquid spilled into the system
- Damage caused by the improper insertion of a PC Card or the installation of an incompatible card
- Improper disc insertion or use of an optical drive
- Diskette drive damage caused by pressure on the diskette drive cover, foreign material in the drive, or the insertion of a diskette with multiple labels
- Damaged or bent diskette eject button
- Fuses blown by attachment of a nonsupported device
- Forgotten computer password (making the computer unusable)
- Sticky keys caused by spilling a liquid onto the keyboard
- Use of an incorrect AC adapter on laptop products

The following symptoms might indicate damage caused by nonwarranted activities:

- Missing parts might be a symptom of unauthorized service or modification.
- If the spindle of a hard disk drive becomes noisy, it may have been subjected to excessive force, or dropped.

Power system checkout

To verify a symptom, follow the steps below:

1. Turn off the computer.
2. Connect the AC adapter.
3. Make sure that power is supplied when you turn on the computer.
4. Turn off the computer.
5. Disconnect the AC adapter.
6. Make sure that the battery pack supplies power when you turn on the computer.

If you suspect a power problem, see the appropriate one of the following power supply checkouts:

- "Checking the AC adapter " on page 21
- "Checking operational charging" on page 21

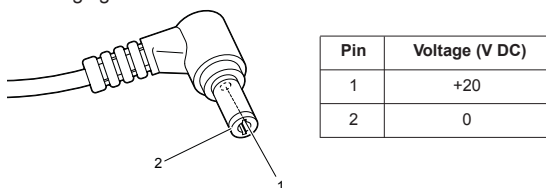
Checking the AC adapter

You are here because the computer fails only when the AC adapter is used.

- If the power-on indicator does not turn on, check the power cord of the AC adapter for correct continuity and installation.
- If the computer does not charge during operation, go to "Checking operational charging".

To check the AC adapter, follow the steps below:

1. Unplug the AC adapter cable from the computer.
2. Measure the output voltage at the plug of the AC adapter cable. See the following figure:

Pin	Voltage (V DC)
1	+20
2	0

Note: Output voltage for the AC adapter pin No. 2 may differ from the one you are servicing.

3. If the voltage is not correct, replace the AC adapter.
4. If the voltage is acceptable, do the following:

- Replace the system board.
- If the problem continues, go to "Lenovo IdeaPad U300/U300s/U400" on page 27.

Note: Noise from the AC adapter does not always indicate a defect.

Checking operational charging

To check whether the battery charges properly during operation, use a discharged battery pack or a battery pack that has less than 50% of the total power remaining when installed in the computer.

Perform operational charging. If the battery status indicator or icon does not light on, remove the battery pack and let it return to room temperature. Reinstall the battery pack. If the charge indicator or icon is still off, replace the battery pack.

If the charge indicator still does not light on, replace the system board. Then reinstall the battery pack. If it is still not charged, go to the next section.

Related service information

This chapter presents the following information:

Restoring the factory contents by using OneKey Recovery

Restore of factory default

The Lenovo IdeaPad U300/U300s/U400 computers come with pre-installed OneKey Rescue System.In order to save application files and the initial backed up files of the system, the hard disk in a Lenovo computer includes a hidden partition when it is shipped. If you need to restore the system to the point of your first boot up, just enter Lenovo OneKey Rescue System and run **Restore to factory default**. For details of OneKey Rescue System, see *the User Guide for OneKey Rescue System*.

Note: This will delete all the new data on the system partition (C drive), which is not recoverable. Make sure to back up your critical data before you perform this action.

Using recovery discs

When you replace a hard disk drive in your computer, you are unable to use the pre-installed Lenovo OneKey Recovery and OneKey Rescue. However, you can use the recovery discs that store your backed up data to restore your new hard drive to a previous backup status.

Note: You can create recovery discs by burning the backup image to a CD/DVD as recovery discs. For details of **Create recovery discs**, see *the User Guide for OneKey Rescue System*.

When you use the recovery discs to boot your computer, the system will enter the user interface for system recovery automatically. Please follow the prompt to insert the backup discs to complete the whole recovery process.

Note: The recovery process might take up to 2 hours.

Passwords

As many as two passwords may be needed for any Lenovo IdeaPad computer: the power-on password (POP) and the supervisor password (SVP).

If any of these passwords has been set, a prompt for it appears on the screen whenever the computer is turned on. The computer does not start until the password is entered.

Exception: If only an SVP is installed, the password prompt does not appear when the operating system is booted.

Power-on password

A power-on password (POP) protects the system from being powered on by an unauthorized person. The password must be entered before an operating system can be booted.

Supervisor password

A supervisor password (SVP) protects the system information stored in the BIOS Setup Utility. The user must enter the SVP in order to get access to the BIOS Setup Utility and change the system configuration.

Attention: If the SVP has been forgotten and cannot be made available to the servicer, there is no service procedure to reset the password. The system board must be replaced for a scheduled fee.

Power management

Note: Power management modes are not supported for APM operating system.

To reduce power consumption, the computer has three power management modes: screen blank, sleep (standby), and hibernation.

Screen blank mode

If the time set on the "Turn off monitor" timer in the operating system expires, the LCD backlight turns off.

To end screen blank mode and resume normal operation, press any key.

Sleep (standby) mode

When the computer enters sleep (standby) mode, the following events occur in addition to what occurs in screen blank mode:

- The LCD is powered off.
- The hard disk drive is powered off.
- The CPU stops.

To enter sleep (standby) mode, Click and select Sleep from the Start menu.

In certain circumstances, the computer goes into sleep (standby) mode automatically:

- If a "suspend time" has been set on the timer, and the user does not do any operation with the keyboard, the hard disk, the parallel connector, or the diskette drive within that time.
- If the battery indicator is amber, indicating that the battery power is low. (Alternatively, if **Hibernate when battery becomes low** has been selected in the "Power Management Properties" window, the computer goes into hibernation mode.)

To cause the computer to return from sleep (standby) mode and resume the operation, do one of the following:

- Press the Fn key.
- Turn on the power switch.

Also, in the following event, the computer automatically returns from sleep (standby) mode and resumes the operation:

- The time set on the resume timer elapses.

Note: The computer does not accept any input immediately after it enters sleep (standby) mode. Wait a few seconds before taking any action to reenter operation mode.

Hibernation mode

In hibernation mode, the following occurs:

- The system status, RAM, VRAM, and setup data are stored on the hard disk.
- The system is powered off.

To cause the computer to enter hibernation mode, follow the steps below:

- If you are using the ACPI operating system and have defined one of the following actions as the event that causes the system to go into hibernation mode, perform that action:
  – Closing the lid.
  – Pressing the power button.

For model U300s, to put the computer into the hibernation mode, click the Start icon and select **Sleep**. The computer will enter the hibernation mode after it remains in the sleep mode for 75 minutes.

Also, the computer goes into hibernation mode automatically in either of the following conditions:

- If a “hibernation time” has been set on the timer, and if the user does not do any operation with the keyboard, the hard disk drive, the parallel connector, or the diskette drive within that time.
- If the timer conditions are satisfied in suspend mode.

When the power is turned on, the computer returns from hibernation mode and resumes operation. The hibernation file in the boot record on the hard disk drive is read, and system status is restored from the hard disk drive.

Lenovo IdeaPad U300/U300s/U400

This chapter presents the following product-specific service references and product-specific parts information:

Specifications

The following table lists the specifications of the Lenovo IdeaPad U300/U300s/U400 :

Table 1. Specifications

Feature	Description
Processor	• Intel Core i SV Processors (Sandy Bridge) (BGA) (U300/U400) • Intel Core ULV Processors (Sandy Bridge) (BGA) (U300s)
Core Chipset	• Intel HM65 (U300) • Intel QS67 (U300s) • Intel HM65 (U400)
Bus architecture	• U300/U300s: FDI DMI 1333MHz DDR3 bus PCIE bus • U400: DMI BUS(5GT/S) DDR3 1333 PCI-E
Graphic memory chip	• Intel HM65 Intergrated (U300) • Intel QS67 Intergrated (U300s) • Intel HM65 Intergrated and ATI HD6470M with 1GBDDR3 VRAM (U400)
Display	• 13.3" (205g) 16:9,1366x768 pixels HD WXGA (>220 nit),Glossy type White LED panel (U300/U300s) • 14.0" (275g) 16:9,1366x768 pixels HD (>220 nit),Glossy type White LED panel (U400)
Standard memory	• DDR3-1066/1333MHz SODIMM × 1(max 4 GB) (Single Channel) (U300/U300s) • DDR3-1066/1333MHz SODIMM × 2 (max 8 GB) (Support Dual Channel) (U400)
CMOS RAM	• 256Byte (U300/U300s) • 4M byte SPI ROM (U400)
Hard disk drive	• 2.5-inch, 7 mm/9.5 mm SATA, HDD/SSD • 32GB SSD+500GB/750GB, 5400rpm/7200rpm (U300/U400)
Optical drive	• 2.5" External 9.5mm RAMBO (U400)

Table 1. Specifications (continued)

Feature	Description
I/O port	• Headphone mic combo jack • RJ45 x 1 (U300/U400) • HDMI port • USB 2.0 port × 2, USB 3.0 port × 1 (U300/U400) • USB 2.0 port × 1, USB 3.0 port × 1 (U300s)
MODEM slot	• N/A
Audio	• 1/8" Stereo Headphone Output & Microphone input combo jack • 2 x 1W speakers • 1 x Internal digital Microphone
Ethernet (on the system board)	• 10/100/1000M , Realtek RTL8111E-VB (U300) • 10/100/1000M , Intel 82579V (U400)
PCI Express Mini Card slot	• 1 slot, support Intel 1030N card
Bluetooth wireless	• Built-in antenna with wireless card module for all Models
Keyboard	• 6 Row, ISO Full Size Keyboard
Touch pad	• Multi-touch type
Integrated camera	• 1.3 mega pixel camera
Battery	• 59 Wh, 4 cells Li-Polymer battery (U300) • 54 Wh, 4 cells Li-Polymer battery (U300s) • 54 Wh, 4 cells or 6 cells Li-Polymer battery (U400)
AC adapter	• 20V, 65W
Pre-installed operating system	• Win 7 Premium (32bit/64bit)

Status indicators

The system status indicators below show the computer status:

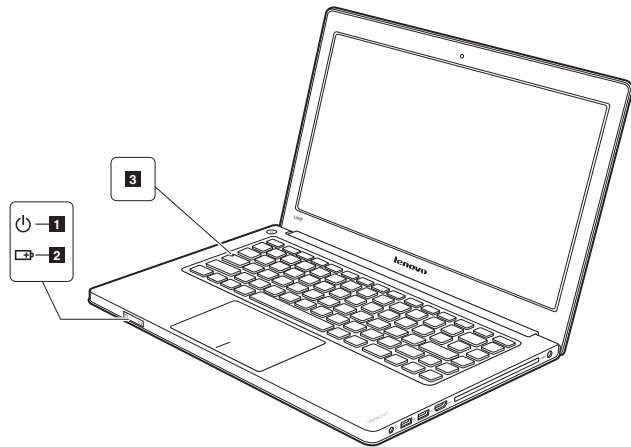



Table 2. Status indicators

Indicator	Meaning
■ Power on ⏻	**White:** System is enabled. **Blinking white:** System is in sleep mode. **Off:** System is in hibernate mode or shut down.

Table 2. Status indicators (continued)

Indicator	Meaning
2 Battery status	**Blinking amber:** (500ms off/1s on) The remaining power of the battery is less than 5% of its capacity. **Blinking amber:** (100ms off/3.2s on) The battery is being charged with the remaining power between 5% and 20% of its capacity. **Amber:** The computer is operating on battery power with the remaining power between 5% and 20% of its capacity. **Blinking white:** The battery is being charged with the remaining power between 20% and 80% of its capacity. **White:** The remaining power of the battery is more than 80% of its capacity, or the computer is operating on battery power with the remaining power between 20% and 80% of its capacity.
3 Caps lock	**White:** Caps Lock mode is enabled. You can enter all alphabetic characters (A-Z) in uppercase without pressing the Shift key. To enable or disable Caps Lock mode, press the CapsLk key.

Function key combinations

The following table shows the function of each combination of function key.

Table 3. Fn key combinations

Key combination	Description
Fn + PrtSc:	pop-up CD/DVD disk (U400 only).
Fn + Home:	Activate the pause function.
Fn + End:	Activate the break function.
Fn + PgUp:	Enable/Disable the scroll lock.
Fn + PgDn:	Activate the insert function.

Table 4. Hotkey

Key	Description
F1 :	Mute/Unmute the sound.
F2 :	Quick decrease volume level.
F3 :	Quick increase volume level.
F4 :	Close same function for main and secondary function.
F5 :	Refresh same function for main and secondary function.
F6 :	Enable/Disable the touchpad.
F7 :	Open the interface for integrated wireless devices settings (on/off).
F8 :	Enable/Disable the microphone.
F9 :	Turn on/off the integrated camera.
F10 :	Open the interface for the display device switch to select this notebook or an external display.
F11 :	Decrease display brightness.
F12 :	Increase display brightness.

Note: In the Hotkey mode, press Fn + F1~F12 to achieve the functions of F1~F12.

FRU replacement notices

This section presents notices related to removing and replacing parts. Read this section carefully before replacing any FRU.

Screw notices

Loose screws can cause a reliability problem. In the Lenovo IdeaPad computer, this problem is addressed with special nylon-coated screws that have the following characteristics:

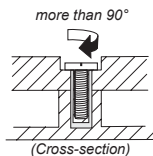
- They maintain tight connections.
- They do not easily come loose, even with shock or vibration.
- They are harder to tighten.
- Each one should be used only once.

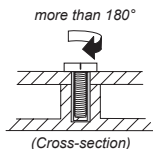
Do the following when you service this machine:

- Keep the screw kit in your tool bag.
- Always use new screws.
- Use a torque screwdriver if you have one.

Tighten screws as follows:

- **Plastic to plastic**
  Turn an additional 90° after the screw head touches the surface of the plastic part:

(Cross-section)

- **Logic card to plastic**
  Turn an additional 180° after the screw head touches the surface of the logic card:

(Cross-section)

- **Torque driver**
  If you have a torque screwdriver , refer to the "Torque" column for each step.
- Make sure that you use the correct screws. If you have a torque screwdriver, tighten all screws firmly to the torque shown in the table. **Never use a screw that you removed. Use a new one. Make sure that all screws are tightened firmly.**
- Ensure torque screwdrivers are calibrated correctly following country specifications.

Removing and replacing an FRU

This section presents exploded figures with the instructions to indicate how to remove and replace the FRU. Make sure to observe the following general rules:

1. Do not attempt to service any computer unless you have been trained and certified. An untrained person runs the risk of damaging parts.
2. Before replacing any FRU, review “FRU replacement notices” on page 32.
3. Begin by removing any FRUs that have to be removed before the failing FRU. Any of such FRUs are listed at the top of the page. Remove them in the order in which they are listed.
4. Follow the correct sequence in the steps to remove the FRU, as given in the figures by the numbers in square callouts.
5. When turning a screw to replace an FRU, turn it in the direction as given by the arrow in the figure.
6. When removing the FRU, move it in the direction as given by the arrow in the figure.
7. To put the new FRU in place, reverse the removal procedures and follow any of the notes that pertain to replacement. For information about connecting and arranging internal cables, see “Locations” on page 98.
8. When replacing an FRU, use the correct screw as shown in the procedures.

⚠ DANGER

Before removing any FRU, turn off the computer, unplug all power cords from electrical outlets, remove the battery pack, and then disconnect any of the interconnecting cables.

Attention: After replacing an FRU, do not turn on the computer until you have made sure that all screws, springs, and other small parts are in place and none are loose inside the computer. Verify this by shaking the computer gently and listening for rattling sounds. Metallic parts or metal flakes can cause electrical short circuits.

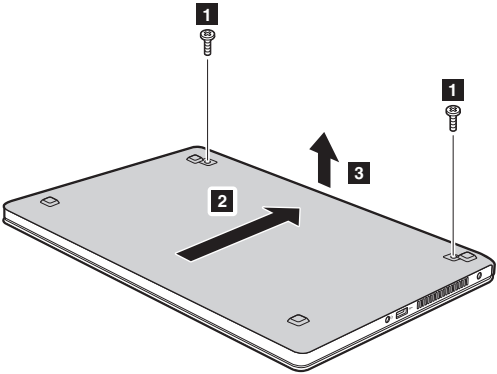
Attention: The system board is sensitive to, and can be damaged by, electrostatic discharge. Before touching it, establish personal grounding by touching a ground point with one hand or using an electrostatic discharge (ESD) strap (P/N 6405959) to remove potential shock reasons.

U300

1010 Base cover (U300)

Note: Turn off the computer first. Otherwise, it may cause permanent damage to the computer.

Figure 1. Removal steps of base cover

Open the rubbers and remove two screws 1, then remove the base cover in the direction shown by arrow 2 3.

Step	Screw (quantity)	Color	Torque
1	M2.5 × 6 mm, flat-head, nylok-coated (2)	Black	3.0 ± 0.2 kgfcm

Note: Applying labels to the base cover

The new base cover FRU is shipped with a kit containing labels of several kinds. When you replace the base cover, you need to apply the following label:

The following labels need to be peeled off from the old base cover, and need to be put on the new base cover.

a COA Label
b Brazil label
c WLAN label for Malaysia
d WLAN label for Indonesia
e GWE for china

For some models, you also need to apply one or two FCC labels. Check the old base cover; if it has one or two FCC labels, find duplicates of them in the label kit and apply them to the new base cover.

For the location of each label, refer to the following figure:

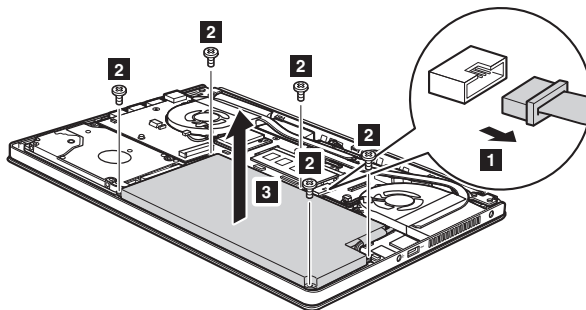
1020 Battery pack (U300)

For access, remove this FRU:

- "1010 Base cover (U300)" on page 34

> ⚠ **DANGER**
> Only use the battery specified in the parts list for your computer. Any other battery could ignite or explode.

Figure 2. Removal steps of battery pack

Detach the battery pack connector in the direction shown by arrow ■, remove five screws 2, and then remove the battery pack in the direction shown by arrow 3.

Step	Screw (quantity)	Color	Torque
2	M2 × 4 mm, flat-head, nylok-coated (5)	Black	1.5 ± 0.2 kgfcm

When installing: Make sure the battery pack connector is attached firmly.

1030 Hard disk drive (U300)

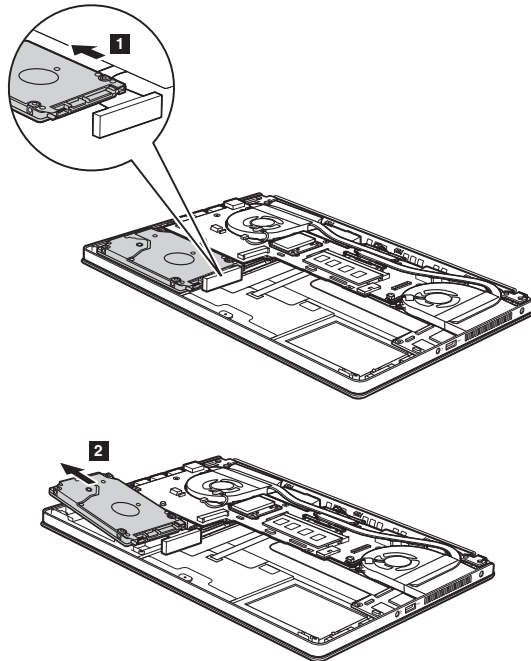
For access, remove these FRUs in order:

- “1010 Base cover (U300)” on page 34
- “1020 Battery pack (U300)” on page 36

Attention:

- **Do not drop the hard disk drive or apply any physical shock to it.** The hard disk drive is sensitive to physical shock. Improper handling can cause damages and permanent loss of data.
- Before removing the drive, suggest the customer to backup all the information on it if possible.
- Never remove the drive while the system is operating or is in suspend mode.

Figure 3. Removal steps of hard disk drive

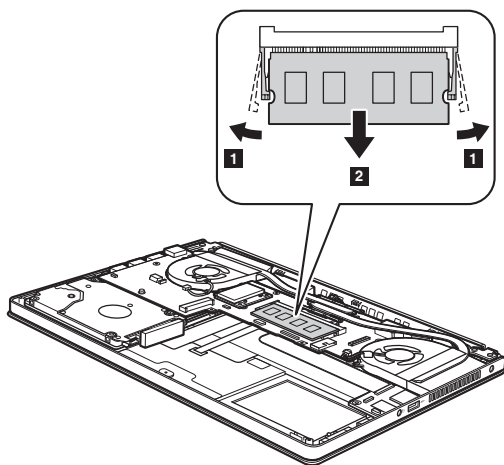
Lift the HDD a little, detach the HDD connector in the direction shown by arrow 1, and then remove the hard disk drive from the slot in the direction shown by arrow 2.

When installing: Make sure that the HDD connector is attached firmly.

1040 DIMM (U300)

For access, remove these FRUs in order:

- “1010 Base cover (U300)” on page 34
- “1020 Battery pack (U300)” on page 36

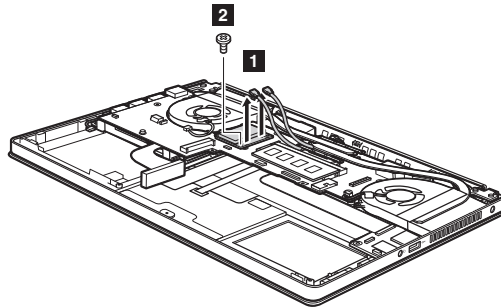
Figure 4. Removal steps of DIMM

Release the two latches on both edges of the socket at the same time in the direction shown by arrows ■, and then unplug the DIMM in the direction shown by arrow 2.

When installing: Insert the notched end of the DIMM into the socket. Push the DIMM firmly, and pivot it until it snaps into the place. Make sure that it is firmly fixed in the slot and difficult to be moved.

1050 PCI Express Mini Card for wireless LAN (U300)

For access, remove these FRUs in order:

- “1010 Base cover (U300)” on page 34
- “1020 Battery pack (U300)” on page 36
- “1030 Hard disk drive (U300)” on page 37

Figure 5. Removal steps of PCI Express Mini Card for wireless LAN

Disconnect the two wireless LAN cables (black, white) 1, and then remove the screw 2.

In step 1, unplug the jacks by using the removal tool antenna RF connector (P/N: 08K7159), or pick up the connectors with your fingers and gently unplug them in the direction shown by arrows.

Notes: wireless LAN card has 2 cables in step 1.
wireless LAN card in some models may have 3 cables in step 1.

Step	Screw (quantity)	Color	Torque
2	M2 × 3 mm, flat-head, nylok-coated (1)	White	1.5 ± 0.2 kgfcm

Figure 5. Removal steps of PCI Express Mini Card for wireless LAN (continued)

Remove the card in the direction shown by arrow 3.

When installing:

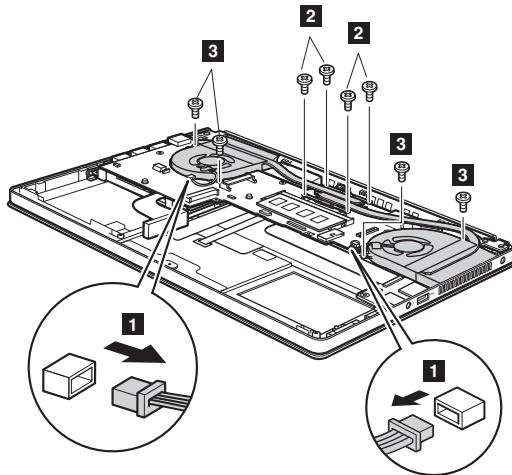
- In models with a wireless LAN card that has two antenna connectors, plug the black cable (1st) (MAIN) into the jack labeled **1**, and the white cable (2nd) (AUX) into jack labeled **2** on the card.
- In models with a wireless LAN card that has three antenna connectors, plug the black cable (1st) (MAIN) into the jack labeled **1**, the grey cable (3rd) into jack labeled **3**, and the white cable (2nd) (AUX) into jack labeled **2** on the card.

1060 Fan assembly and Heat Sink assembly (U300)

For access, remove these FRUs in order:

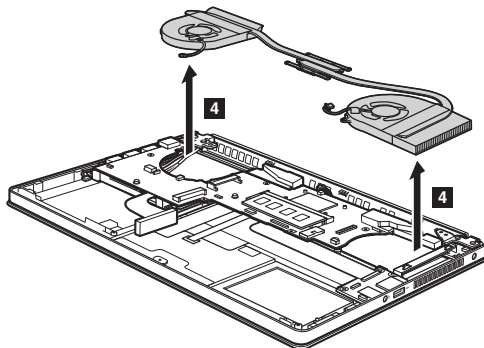
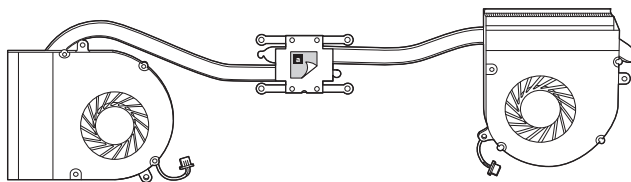
- “1010 Base cover (U300)” on page 34
- “1020 Battery pack (U300)” on page 36
- “1030 Hard disk drive (U300)” on page 37
- “1050 PCI Express Mini Card for wireless LAN (U300)” on page 39

Figure 6. Removal steps of fan assembly and heat sink assembly

Detach two fan connectors in the direction shown by arrows 1, remove four screws 2 and four screws 3.

When installing: Make sure that the fan connector is attached firmly to the system board.

Step	Screw (quantity)	Color	Torque
2	M2 × 3 mm, flat-head, nylok-coated (4)	White	1.5 ± 0.2 kgfcm
3	M2 × 4 mm, flat-head, nylok-coated (4)	Black	1.5 ± 0.2 kgfcm

Figure 6. Removal steps of fan assembly and heat sink assembly (continued)

Lift the fan assembly and heat sink assembly in the direction shown by arrow **4**. Be careful not to damage the connector.

Attention: Do not handle the heat sink assembly roughly. Improper handling can cause distortion or deformation and imperfect contact with components.

When installing:

- Before you attach the fan assembly to the computer, apply thermal grease, at an amount of 0.2 grams, to the **a** part shown in the figure above. Either too much or too less grease application can cause a thermal problem due to imperfect contact with a component.

1070 System board (U300)

Important notices for handling the system board:

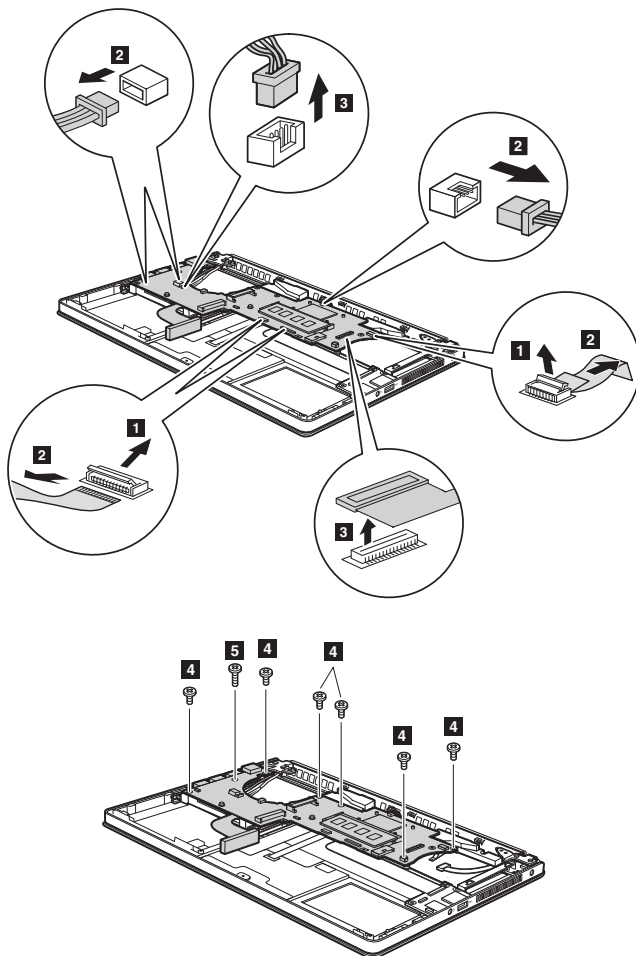
When handling the system board, bear the following in mind.

- Be careful not to drop the system board on a bench top that has a hard surface, such as metal, wood, or composite.
- Avoid rough handling of any kind.
- In the whole process, make sure not to drop or stack the system board.
- If you put a system board down, make sure to put it only on a padded surface such as an ESD mat or conductive corrugated material.

For access, remove these FRUs in order:

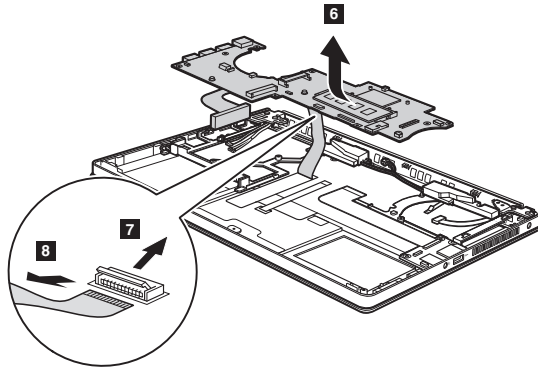
- “1010 Base cover (U300)” on page 34
- “1020 Battery pack (U300)” on page 36
- “1030 Hard disk drive (U300)” on page 37
- “1050 PCI Express Mini Card for wireless LAN (U300)” on page 39
- “1060 Fan assembly and Heat Sink assembly (U300)” on page 41

Figure 7. Removal steps of system board

Detach eight connectors on system board in the direction shown by arrows ■ 2 3. Remove six screws 4 and one screw 5.

When installing: Make sure that all the connectors are attached firmly.

Step	Screw (quantity)	Color	Torque
4	M2 × 2.5 mm, flat-head, nylok-coated (6)	White	1.5 ± 0.2 kgfcm
5	M2 × 5 mm, flat-head, nylok-coated (1)	White	1.5 ± 0.2 kgfcm

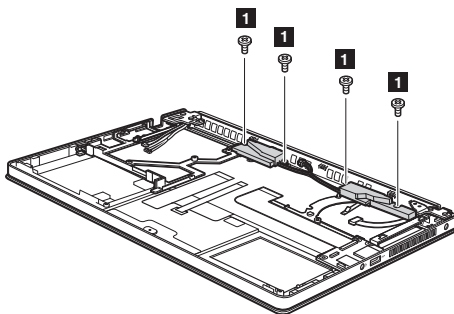
Figure 7. Removal steps of system board (continued)

Lift the system board in the direction shown by arrow 6. Detach the keyboard connector under system board in the direction shown by arrows 7 8.Then remove the system board.

1080 Speakers and microphone (U300)

For access, remove these FRUs in order:

- “1010 Base cover (U300)” on page 34
- “1020 Battery pack (U300)” on page 36
- “1030 Hard disk drive (U300)” on page 37
- “1050 PCI Express Mini Card for wireless LAN (U300)” on page 39
- “1060 Fan assembly and Heat Sink assembly (U300)” on page 41
- “1070 System board (U300)” on page 43

Figure 8. Removal steps of speakers and microphone

Remove four screws ■.

Step	Screw (quantity)	Color	Torque
■	M2 × 3 mm, flat-head, nylok-coated (4)	White	1.5 ± 0.2 kgfcm

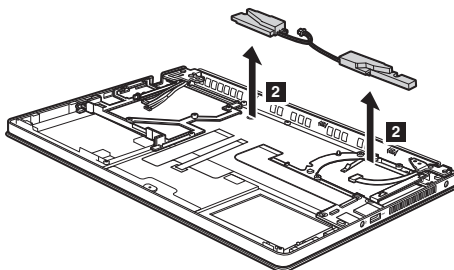
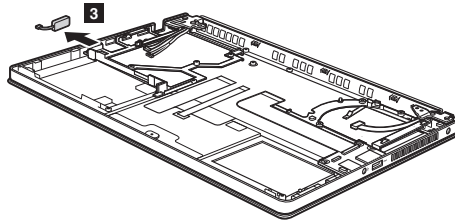
Remove the speakers 2.

When installing: Make sure that the speakers connector is attached firmly.

Figure 8. Removal steps of the speakers and microphone (continued)

Remove the microphone in the direction shown by arrow 3.

When installing: Make sure that the microphone connector is attached firmly.

1090 LCD unit (U300)

For access, remove these FRUs in order:

- “1010 Base cover (U300)” on page 34
- “1020 Battery pack (U300)” on page 36
- “1030 Hard disk drive (U300)” on page 37
- “1050 PCI Express Mini Card for wireless LAN (U300)” on page 39
- “1060 Fan assembly and Heat Sink assembly (U300)” on page 41
- “1070 System board (U300)” on page 43
- “1080 Speakers and microphone (U300)” on page 46

Figure 9. Removal steps of LCD unit

Lift the LCD bezel with fingers in the direction shown by arrows ■. Remove four screws 2.

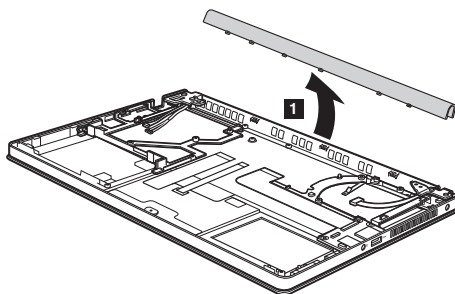
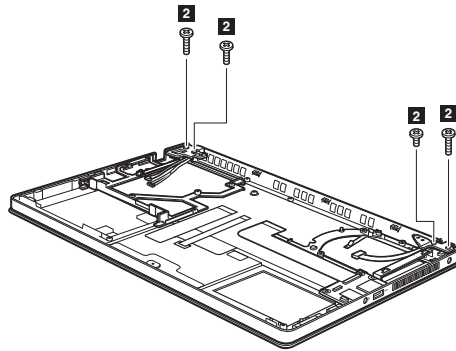
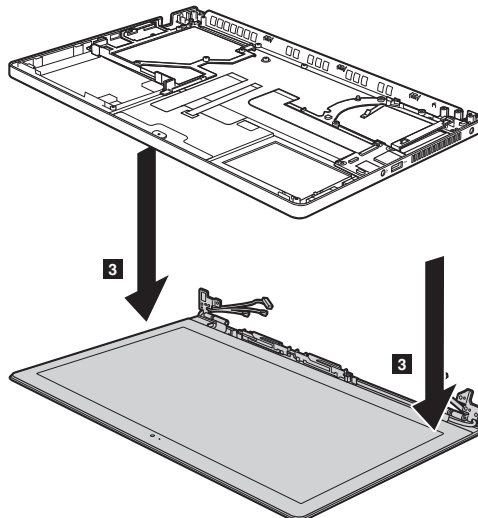



Figure 9. Removal steps of LCD unit (continued)

Step	Screw (quantity)	Color	Torque
2	M2.5 × 6 mm, flat-head, nylok-coated (4)	Black	3.0 ± 0.2 kgfcm

When installing:

- Route the antenna cables along the cable guides. As you route the cables, make sure that they are not subjected to any tension. Tension could cause the cables to be damaged by the cable guides, or a wire to be broken.
- Make sure that the LCD connector is attached firmly and make sure that you do not pinch the antenna cables when you attach the LCD assembly. Route the LCD cable along the cable guides.

Remove the LCD unit in the direction shown by arrows 3.

1100 Keyboard and keyboard bezel (U300)

For access, remove these FRUs in order:

- “1010 Base cover (U300)” on page 34
- “1020 Battery pack (U300)” on page 36
- “1030 Hard disk drive (U300)” on page 37
- “1050 PCI Express Mini Card for wireless LAN (U300)” on page 39
- “1060 Fan assembly and Heat Sink assembly (U300)” on page 41
- “1070 System board (U300)” on page 43
- “1080 Speakers and microphone (U300)” on page 46
- “1090 LCD unit (U300)” on page 48

Figure 10. Removal steps of keyboard and keyboard bezel

Remove the AC power adapter jack connector in the direction shown by arrow ■.

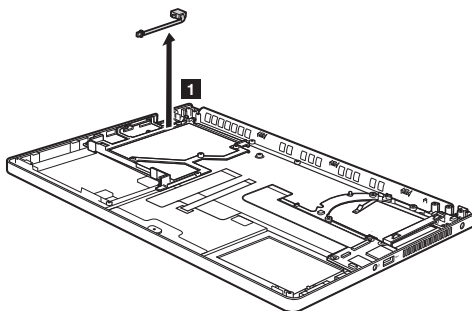



Figure 10. Removal steps of keyboard and keyboard bezel (continued)

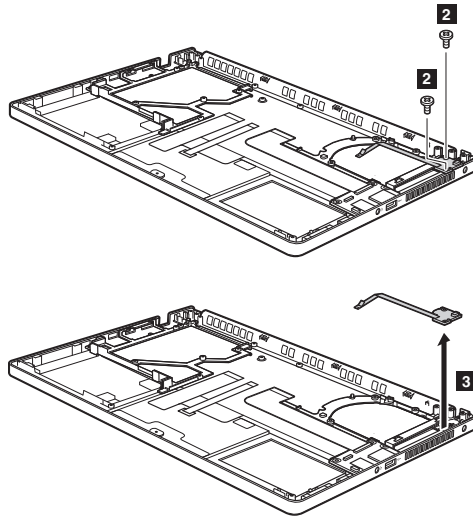
Remove two screws 2, release the power button in the direction shown by arrows 3.

Step	Screw (quantity)	Color	Torque
2	M2 × 3 mm, flat-head, nylok-coated (2)	Black	1.5 ± 0.2 kgfcm

Figure 10. Removal steps of keyboard and keyboard bezel (continued)

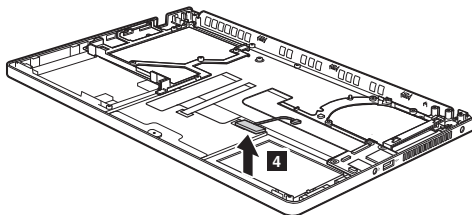
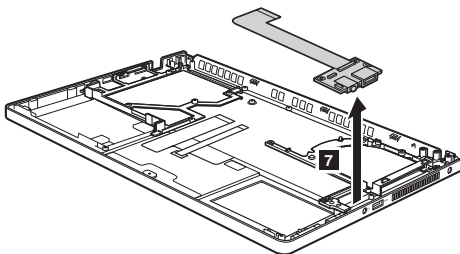
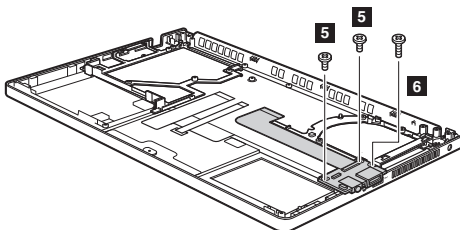
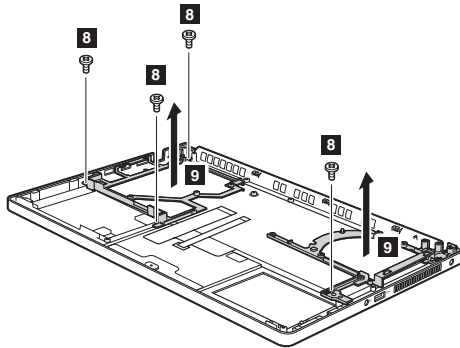
Remove the system status indicators board in the direction shown by arrow 4.

Remove two screws 5 and one screw 6, then remove the USB board in the direction shown by arrow 7.

Step	Screw (quantity)	Color	Torque
5	M2 × 3 mm, flat-head, nylok-coated (2)	Black	1.5 ± 0.2 kgfcm
6	M2 × 5 mm, flat-head, nylok-coated (1)	Black	1.5 ± 0.2 kgfcm

Figure 10. Removal steps of keyboard and keyboard bezel (continued)

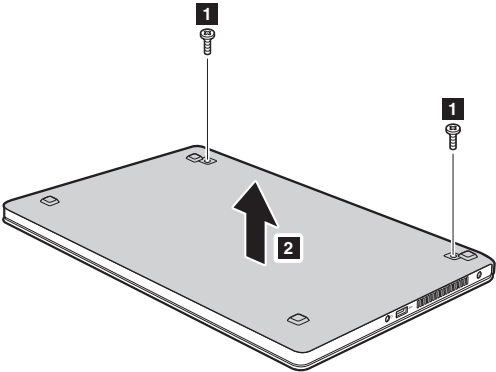
Remove four screws 8, then remove two brackets in the direction shown by arrows 9.

Step	Screw (quantity)	Color	Torque
8	M2 × 3 mm, flat-head, nylok-coated (4)	Black	1.5 ± 0.2 kgfcm

U300s

1010 Base cover (U300s)

Note: Turn off the computer first. Otherwise, it may cause permanent damage to the computer.

Figure 1. Removal steps of base cover

Open the rubbers and remove two screws ■, then remove the base cover in the direction shown by arrow 2.

Step	Screw (quantity)	Color	Torque
■	M2 × 7 mm, flat-head, nylok-coated (2)	Black	1.5 ± 0.2 kgfcm

Note: Applying labels to the base cover

The new base cover FRU is shipped with a kit containing labels of several kinds. When you replace the base cover, you need to apply the following label:

The following labels need to be peeled off from the old base cover, and need to be put on the new base cover.

- a COA Label
- b Brazil label
- c WLAN label for Malaysia
- d WLAN label for Indonesia
- e GWE for china

For some models, you also need to apply one or two FCC labels. Check the old base cover; if it has one or two FCC labels, find duplicates of them in the label kit and apply them to the new base cover.

For the location of each label, refer to the following figure:

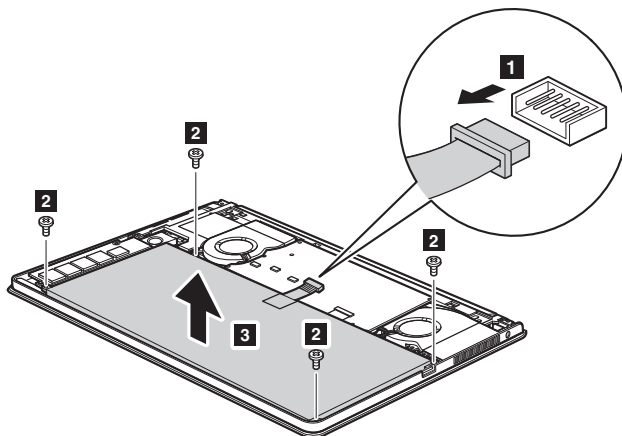
1020 Battery pack (U300s)

For access, remove this FRU:

- “1010 Base cover (U300s)” on page 54

> ⚠ **DANGER**
>
> Only use the battery specified in the parts list for your computer. Any other battery could ignite or explode.

Figure 2. Removal steps of battery pack

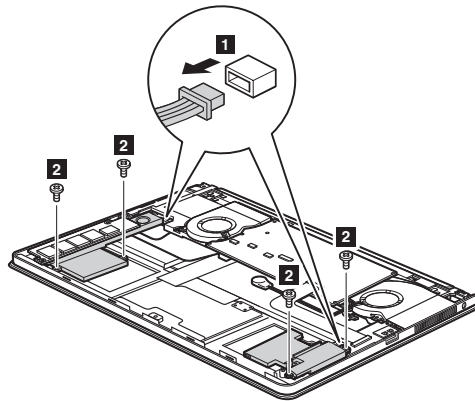
Detach the battery pack connector in the direction shown by arrow 1, remove four screws 2, and then remove the battery pack 3.

Step	Screw (quantity)	Color	Torque
2	M2 × 3 mm, flat-head, nylok-coated (4)	White	1.5 ± 0.2 kgfcm

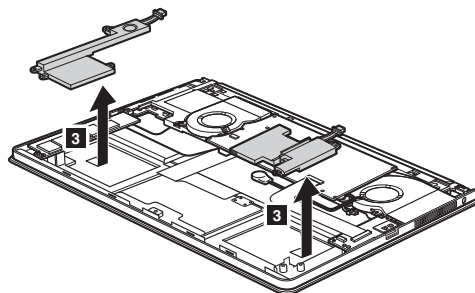
When installing: Make sure the battery pack connector is attached firmly.

1030 Speakers (U300s)

For access, remove these FRUs in order:
- "1010 Base cover (U300s)" on page 54
- "1020 Battery pack (U300s)" on page 56

Figure 3. Removal steps of speakers

Detach two speakers connectors in the direction shown by arrow 1. Remove four screws 2.

Step	Screw (quantity)	Color	Torque
2	M2 × 4.5 mm, flat-head, nylok-coated (4)	White	1.0 ± 0.2 kgfcm

Remove the speakers in the direction shown by arrows 3.

When installing: Make sure that the speaker connectors are attached firmly.

1040 Solid State Disk (U300s)

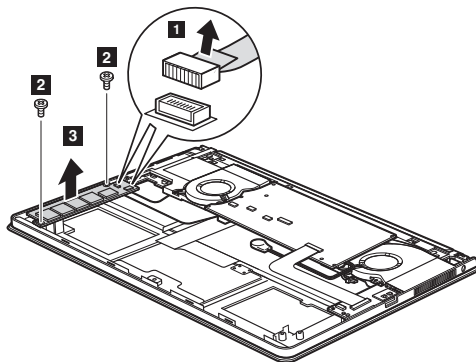
For access, remove these FRUs in order:

- "1010 Base cover (U300s)" on page 54
- "1020 Battery pack (U300s)" on page 56
- "1030 Speakers (U300s)" on page 57

Attention:

- **Do not drop the solid state disk or apply any physical shock to it.** The hard disk drive is sensitive to physical shock. Improper handling can cause damages and permanent loss of data.
- Before removing the drive, suggest the customer to backup all the information on it if possible.
- Never remove the drive while the system is operating or is in suspend mode.

Figure 4. Removal steps of solid state disk

Unplug two connectors in the direction shown by arrow ■, remove two screws 2, and then remove the solid state disk in the direction shown by arrow 3.

Step	Screw (quantity)	Color	Torque
2	M2 × 3 mm, flat-head, nylok-coated (2)	Black	1.5 ± 0.2 kgfcm

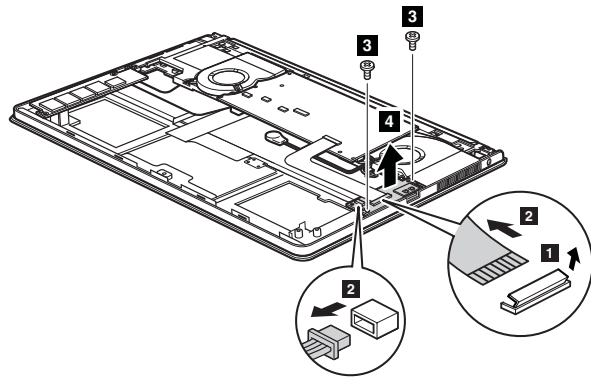
When installing: Make sure that the SSD connector is attached firmly.

1050 USB Board (U300s)

For access, remove these FRUs in order:

- “1010 Base cover (U300s)” on page 54
- “1020 Battery pack (U300s)” on page 56
- “1030 Speakers (U300s)” on page 57

Figure 5. Removal steps of USB board

Unplug three connectors in the direction by arrows ■ 2, remove two screws 3, then remove the USB board 4.

Step	Screw (quantity)	Color	Torque
3	M2 × 3 mm, flat-head, nylok-coated (2)	Black	1.5 ± 0.2 kgfcm

1060 Keyboard and keyboard bezel (U300s)

For access, remove these FRUs in order:

- "1010 Base cover (U300s)" on page 54
- "1020 Battery pack (U300s)" on page 56
- "1030 Speakers (U300s)" on page 57
- "1040 Solid State Disk (U300s)" on page 58
- "1050 USB Board (U300s)" on page 59

Figure 6. Removal steps of keyboard and keyboard bezel

Lift the keyboard cover with fingers in the direction shown by arrows ■.

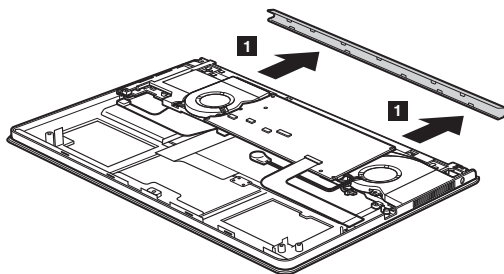
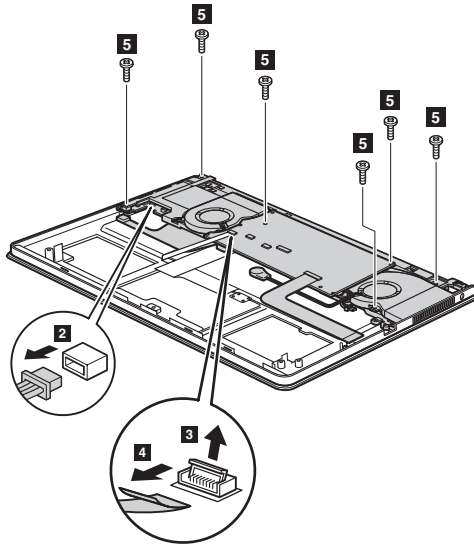



Figure 6. Removal steps of keyboard and keyboard bezel (continued)

Detach the microphone connector and touch pad connector in the direction shown by arrows 2 3 4, then remove six screws 5.

Step	Screw (quantity)	Color	Torque
5	M2 × 5 mm, flat-head, nylok-coated (6)	Black	1.5 ± 0.2 kgfcm

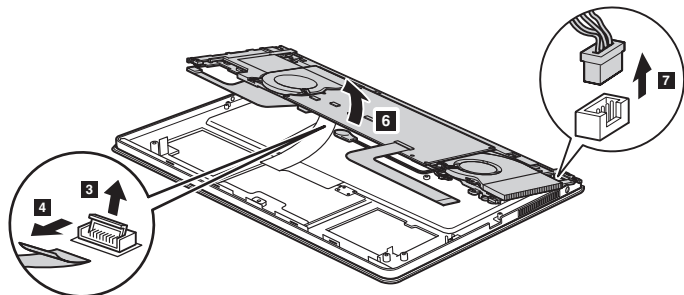
Lift the system board a little 6, detach two connectors in the direction shown by arrows 3 4 7.

When installing: Make sure that the connectors are attached firmly.

Figure 6. Removal steps of keyboard and keyboard bezel (continued)

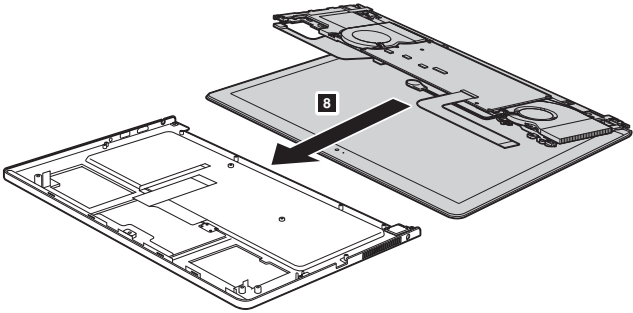
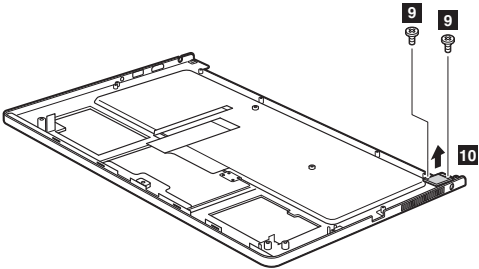
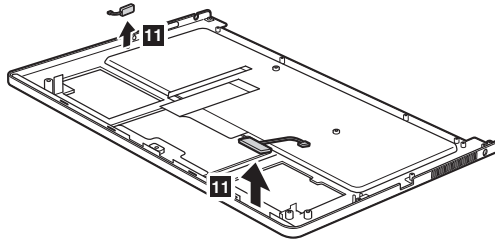
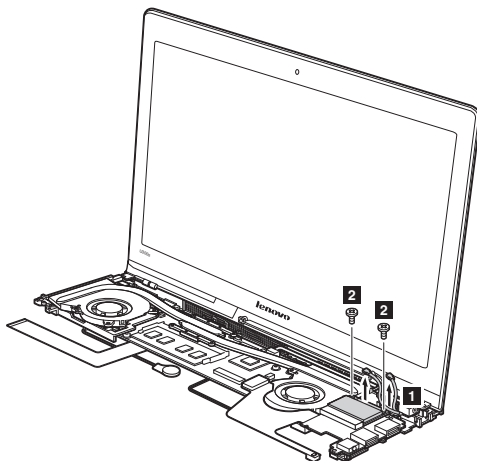
Remove the keyboard and keyboard bezel 8.

Remove two screws 9 and then remove the power button board in the direction shown by arrow 10.

Step	Screw (quantity)	Color	Torque
9	M2 × 3 mm, flat-head, nylok-coated (2)	White	1.5 ± 0.2 kgfcm

Figure 6. Removal steps of keyboard and keyboard bezel (continued)

Remove the Minnie microphone board and LED board in the direction shown by arrows **11**.

1070 PCI Express Mini Card for wireless LAN (U300s)

For access, remove these FRUs in order:

- “1010 Base cover (U300s)” on page 54
- “1020 Battery pack (U300s)” on page 56
- “1030 Speakers (U300s)” on page 57
- “1040 Solid State Disk (U300s)” on page 58
- “1050 USB Board (U300s)” on page 59
- “1060 Keyboard and keyboard bezel (U300s)” on page 60

Figure 7. Removal steps of PCI Express Mini Card for wireless LAN

Disconnect the two wireless LAN cables (black, white) ■, and then remove the screw 2.

In step ■, unplug the jacks by using the removal tool antenna RF connector (P/N: 08K7159), or pick up the connectors with your fingers and gently unplug them in the direction shown by arrows.

Notes: wireless LAN card has 2 cables in step ■.
wireless LAN card in some models may have 3 cables in step ■.

Step	Screw (quantity)	Color	Torque
2	M2 × 2.5 mm, flat-head, nylok-coated (2)	White	1.5 ± 0.3 kgfcm

Figure 7. Removal steps of PCI Express Mini Card for wireless LAN (continued)

Remove the card in the direction shown by arrow 3.

When installing:

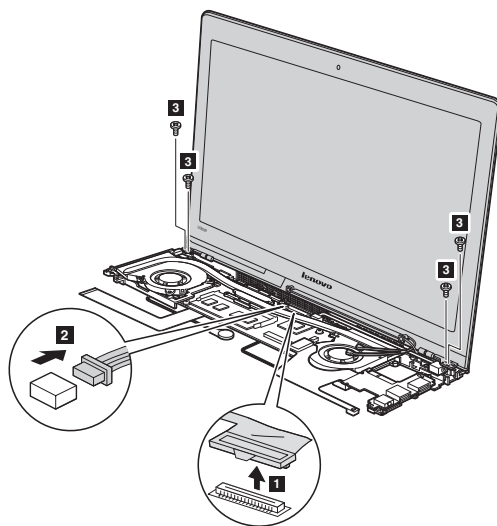
- In models with a wireless LAN card that has two antenna connectors, plug the black cable (1st) (MAIN) into the jack labeled **1**, and the white cable (2nd) (AUX) into jack labeled **2** on the card.
- In models with a wireless LAN card that has three antenna connectors, plug the black cable (1st) (MAIN) into the jack labeled **1**, the grey cable (3rd) into jack labeled **3**, and the white cable (2nd) (AUX) into jack labeled **2** on the card.

1080 LCD unit (U300s)

For access, remove these FRUs in order:

- “1010 Base cover (U300s)” on page 54
- “1020 Battery pack (U300s)” on page 56
- “1030 Speakers (U300s)” on page 57
- “1040 Solid State Disk (U300s)” on page 58
- “1050 USB Board (U300s)” on page 59
- “1060 Keyboard and keyboard bezel (U300s)” on page 60
- “1070 PCI Express Mini Card for wireless LAN (U300s)” on page 64

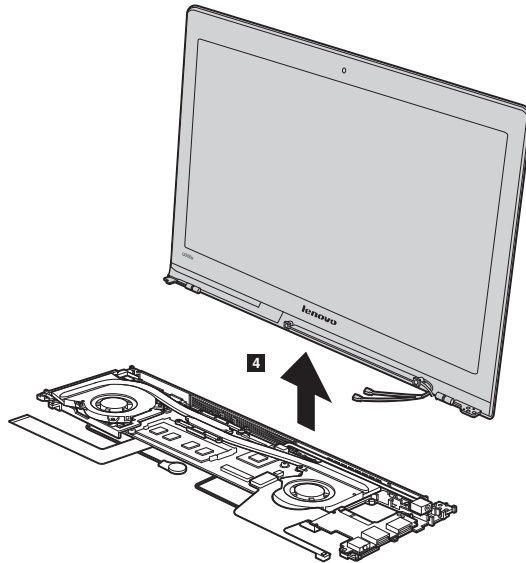
Figure 8. Removal steps of LCD unit

Unplug the LCD connector and the camera connector in the direction shown by arrows 1 2. Remove four screws 3.

Step	Screw (quantity)	Color	Torque
3	M2.5 × 4 mm, flat-head, nylok-coated (4)	Black	2.5 ± 0.2 kgfcm

When installing:

- Route the antenna cables along the cable guides. As you route the cables, make sure that they are not subjected to any tension. Tension could cause the cables to be damaged by the cable guides, or a wire to be broken.
- Make sure that the LCD connector is attached firmly and make sure that you do not pinch the antenna cables when you attach the LCD assembly. Route the LCD cable along the cable guides.

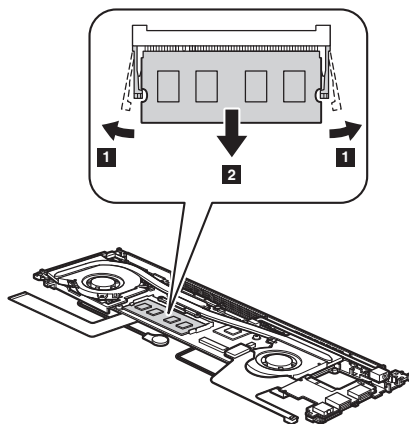
Figure 8. Removal steps of LCD unit (continued)

Remove the LCD unit in the direction shown by arrow 4.

1090 DIMM (U300s)

For access, remove these FRUs in order:

- “1010 Base cover (U300s)” on page 54
- “1020 Battery pack (U300s)” on page 56
- “1030 Speakers (U300s)” on page 57
- “1040 Solid State Disk (U300s)” on page 58
- “1050 USB Board (U300s)” on page 59
- “1060 Keyboard and keyboard bezel (U300s)” on page 60
- “1070 PCI Express Mini Card for wireless LAN (U300s)” on page 64
- “1080 LCD unit (U300s)” on page 66

Figure 9. Removal steps of DIMM

Release the two latches on both edges of the socket at the same time in the direction shown by arrows 1, and then unplug the DIMM in the direction shown by arrow 2.

When installing: Insert the notched end of the DIMM into the socket. Push the DIMM firmly, and pivot it until it snaps into the place. Make sure that it is firmly fixed in the slot and difficult to be moved.

1100 Fan assembly and Heat Sink assembly (U300s)

For access, remove these FRUs in order:

- “1010 Base cover (U300s)” on page 54
- “1020 Battery pack (U300s)” on page 56
- “1030 Speakers (U300s)” on page 57
- “1040 Solid State Disk (U300s)” on page 58
- “1050 USB Board (U300s)” on page 59
- “1060 Keyboard and keyboard bezel (U300s)” on page 60
- “1070 PCI Express Mini Card for wireless LAN (U300s)” on page 64
- “1080 LCD unit (U300s)” on page 66

Figure 10. Removal steps of fan assembly and heat sink assembly

Detach two fan connectors in the direction shown by arrow ■ and remove four screws 2 and four screws 3 on one side.Then remove two screws 4 on the other side.

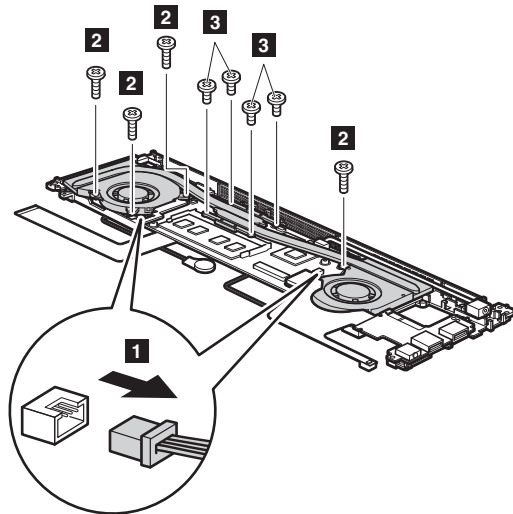
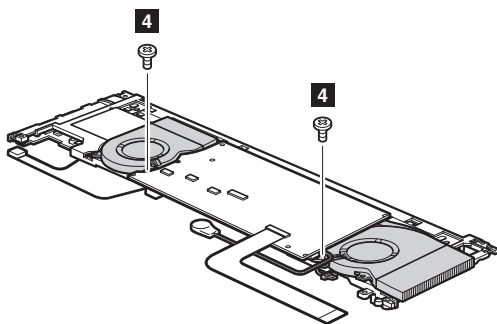



Figure 10. Removal steps of fan assembly and heat sink assembly (continued)

When installing: Make sure that the fan connector is attached firmly to the system board.

Step	Screw (quantity)	Color	Torque
2	M2 × 4 mm, flat-head, nylok-coated (4)	White	1.5 ± 0.2 kgfcm
3	M2 × 3 mm, flat-head, nylok-coated (4)	White	1.5 ± 0.2 kgfcm
4	M2 × 3 mm, flat-head, nylok-coated (2)	White	1.5 ± 0.2 kgfcm

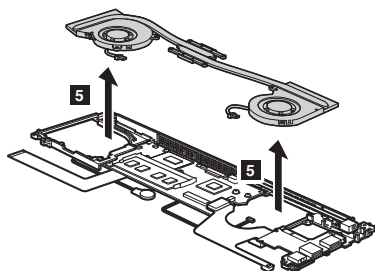
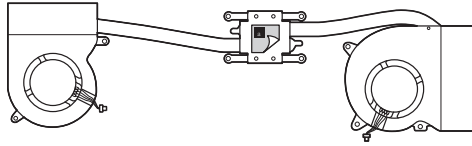
Lift the fan assembly and heat sink assembly in the direction shown by arrows 5. Be careful not to damage the connector.

Attention: Do not handle the heat sink assembly roughly. Improper handling can cause distortion or deformation and imperfect contact with components.

Figure 10. Removal steps of fan assembly and heat sink assembly (continued)

When installing:

- Before you attach the fan assembly to the computer, apply thermal grease, at an amount of 0.2 grams, to the **a** part shown in the figure above. Either too much or too less grease application can cause a thermal problem due to imperfect contact with a component.

1110 System board (U300s)

Important notices for handling the system board:

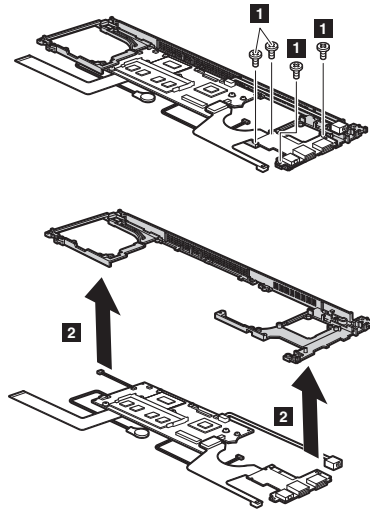
When handling the system board, bear the following in mind.

- Be careful not to drop the system board on a bench top that has a hard surface, such as metal, wood, or composite.
- Avoid rough handling of any kind.
- In the whole process, make sure not to drop or stack the system board.
- If you put a system board down, make sure to put it only on a padded surface such as an ESD mat or conductive corrugated material.

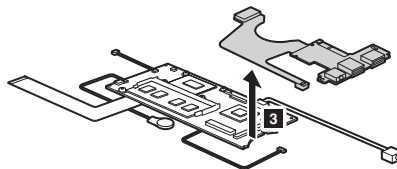
For access, remove these FRUs in order:

- “1010 Base cover (U300s)” on page 54
- “1020 Battery pack (U300s)” on page 56
- “1030 Speakers (U300s)” on page 57
- “1040 Solid State Disk (U300s)” on page 58
- “1050 USB Board (U300s)” on page 59
- “1060 Keyboard and keyboard bezel (U300s)” on page 60
- “1070 PCI Express Mini Card for wireless LAN (U300s)” on page 64
- “1080 LCD unit (U300s)” on page 66
- “1090 DIMM (U300s)” on page 68
- “1100 Fan assembly and Heat Sink assembly (U300s)” on page 69

Figure 11. Removal steps of system board

Remove four screws ■, then remove the fan bracket from the system board in the direction shown by arrows 2.

When installing: Make sure that the power connector is attached firmly.

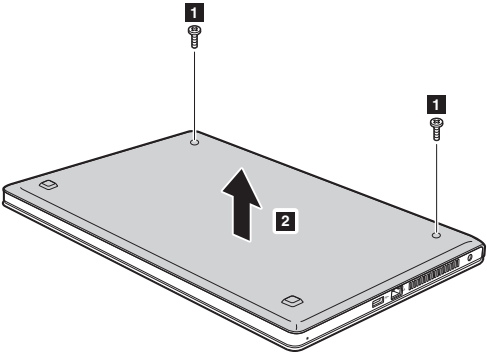
Step	Screw (quantity)	Color	Torque
■	M2 × 3 mm, flat-head, nylok-coated (4)	Black	1.5 ± 0.2 kgfcm

Remove the IO board in the direction shown by arrow 3.

U400

1010 Base cover (U400)

Note: Turn off the computer first. Otherwise, it may cause permanent damage to the computer.

Figure 1. Removal steps of base cover

Open the rubbers and remove two screws 1, then remove the base cover in the direction shown by arrow 2.

Step	Screw (quantity)	Color	Torque
1	M2 × 4 mm, flat-head, nylok-coated (2)	White	3.5±0.24 kgfcm

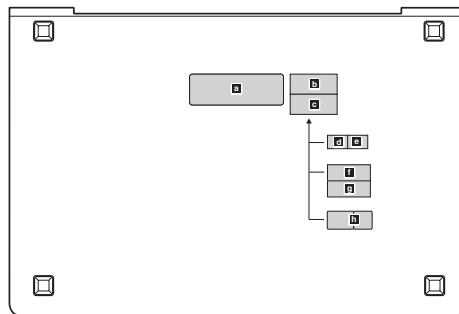
Note: Applying labels to the base cover

The new base cover FRU is shipped with a kit containing labels of several kinds. When you replace the base cover, you need to apply the following label:

The following labels need to be peeled off from the old base cover, and need to be put on the new base cover.

- a COA label
- b Brazil label (WLAN) or WLAN label for US/CA/TW or Israel label for WLAN
- c Brazil label (BT) or BT label for US/CA/TW
- d SIRIM label for Malaysia
- e SIRIM label for Malaysia
- f WLAN label for Indonesia
- g BT label for Indonesia
- h GWE for china

For some models, you also need to apply one or two FCC labels. Check the old base cover; if it has one or two FCC labels, find duplicates of them in the label kit and apply them to the new base cover.

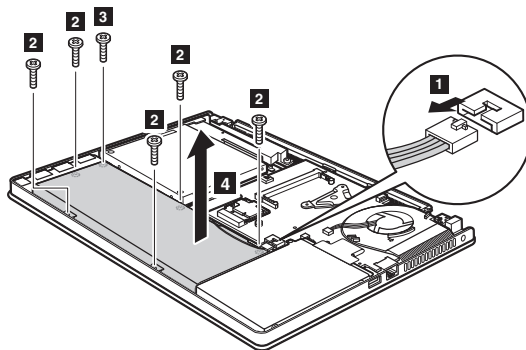
For the location of each label, refer to the following figure:

1020 Battery pack (U400)

For access, remove this FRU:

- “1010 Base cover (U400)” on page 74

> ⚠ **DANGER**
> Only use the battery specified in the parts list for your computer. Any other battery could ignite or explode.

Figure 2. Removal steps of battery pack

Detach the battery pack connector in the direction shown by arrow 1, remove five screws 2 and one screw 3, and then remove the battery pack 4.

Step	Screw (quantity)	Color	Torque
2	M2 × 6 mm, flat-head, nylok-coated (5)	Black	1.6±0.24 kgfcm
3	M2 × 7 mm, flat-head, nylok-coated (1)	White	1.6±0.24 kgfcm

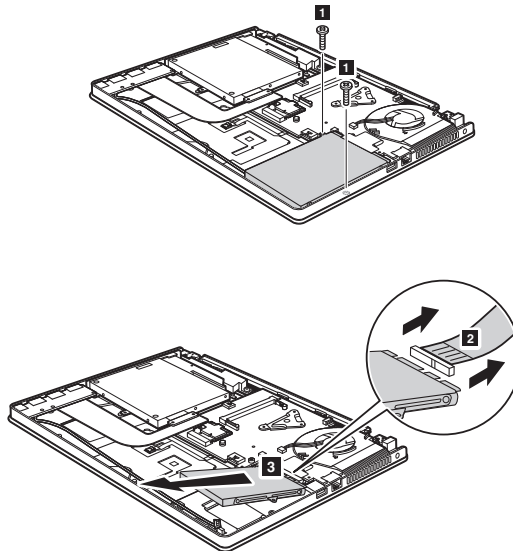
When installing: Make sure the battery pack connector is attached firmly.

1030 Hard disk drive (U400)

For access, remove these FRUs in order:
- “1010 Base cover (U400)” on page 74
- “1020 Battery pack (U400)” on page 76

Attention:
- **Do not drop the hard disk drive or apply any physical shock to it.** The hard disk drive is sensitive to physical shock. Improper handling can cause damages and permanent loss of data.
- Before removing the drive, suggest the customer to backup all the information on it if possible.
- Never remove the drive while the system is operating or is in suspend mode.

Figure 3. Removal steps of hard disk drive

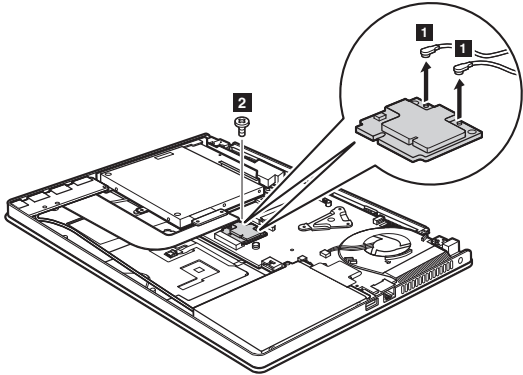
Remove two screws ■, lift the HDD a little. Detach the HDD connector in the direction shown by arrows 2, and then remove the hard disk drive from the slot in the direction shown by arrow 3.

Step	Screw (quantity)	Color	Torque
■	M2 × 2.5 mm, flat-head, nylok-coated (2)	Black	1.6±0.24 kgfcm

When installing: Make sure that the HDD connector is attached firmly.

1040 PCI Express Mini Card for wireless LAN (U400)

For access, remove these FRUs in order:

- “1010 Base cover (U400)” on page 74
- “1020 Battery pack (U400)” on page 76

Figure 4. Removal steps of PCI Express Mini Card for wireless LAN

Disconnect the two wireless LAN cables (black, white) ■, and then remove the screw 2.

In step ■, unplug the jacks by using the removal tool antenna RF connector (P/N: 08K7159), or pick up the connectors with your fingers and gently unplug them in the direction shown by arrows.

Notes: wireless LAN card has 2 cables in step ■.
wireless LAN card in some models may have 3 cables in step ■.

Step	Screw (quantity)	Color	Torque
2	M2 × 2.5 mm, flat-head, nylok-coated (1)	Black	1.6 ± 0.24 kgfcm

Figure 4. Removal steps of PCI Express Mini Card for wireless LAN (continued)
Remove the card in the direction shown by arrow 3.

When installing:

- In models with a wireless LAN card that has two antenna connectors, plug the black cable (1st) (MAIN) into the jack labeled **1**, and the white cable (2nd) (AUX) into jack labeled **2** on the card.
- In models with a wireless LAN card that has three antenna connectors, plug the black cable (1st) (MAIN) into the jack labeled **1**, the grey cable (3rd) into jack labeled **3**, and the white cable (2nd) (AUX) into jack labeled **2** on the card.

1050 System board (U400)

Important notices for handling the system board:

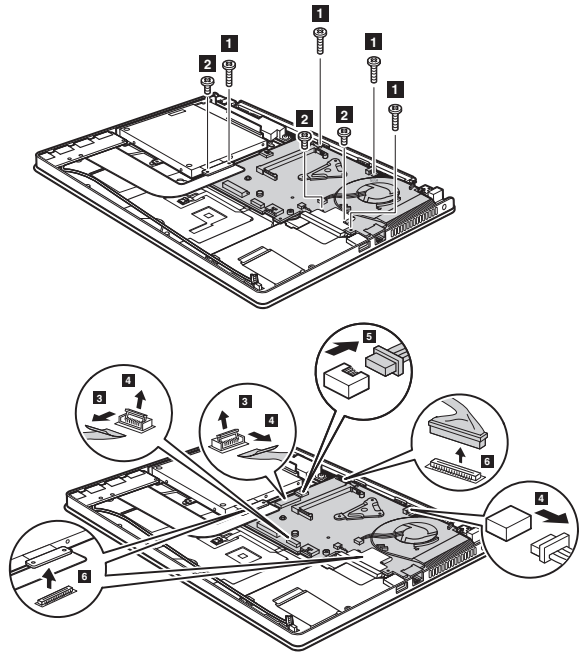
When handling the system board, bear the following in mind.

- Be careful not to drop the system board on a bench top that has a hard surface, such as metal, wood, or composite.
- Avoid rough handling of any kind.
- In the whole process, make sure not to drop or stack the system board.
- If you put a system board down, make sure to put it only on a padded surface such as an ESD mat or conductive corrugated material.

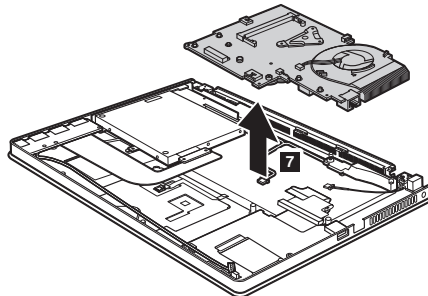
For access, remove these FRUs in order:

- “1010 Base cover (U400)” on page 74
- “1020 Battery pack (U400)” on page 76
- “1030 Hard disk drive (U400)” on page 77
- “1040 PCI Express Mini Card for wireless LAN (U400)” on page 78

Figure 5. Removal steps of system board

Remove four screws ■ and three screws 2. Detach seven connectors in the direction shown by arrows 3 4 5 6.

When installing: Make sure that the connectors are attached firmly.

Step	Screw (quantity)	Color	Torque
■	M2 × 6 mm, flat-head, nylok-coated (4)	Black	1.6 ± 0.24 kgfcm
2	M2 × 2.5 mm, flat-head, nylok-coated (3)	Black	1.6 ± 0.24 kgfcm

Remove the system board in the direction shown by arrow 7.

1060 USB board and HDD board (U400)

For access, remove these FRUs in order:

- “1010 Base cover (U400)” on page 74
- “1020 Battery pack (U400)” on page 76
- “1030 Hard disk drive (U400)” on page 77
- “1040 PCI Express Mini Card for wireless LAN (U400)” on page 78
- “1050 System board (U400)” on page 80

Figure 6. Removal steps of USB board and HDD board

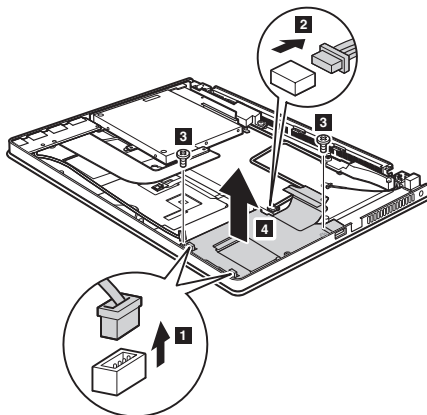
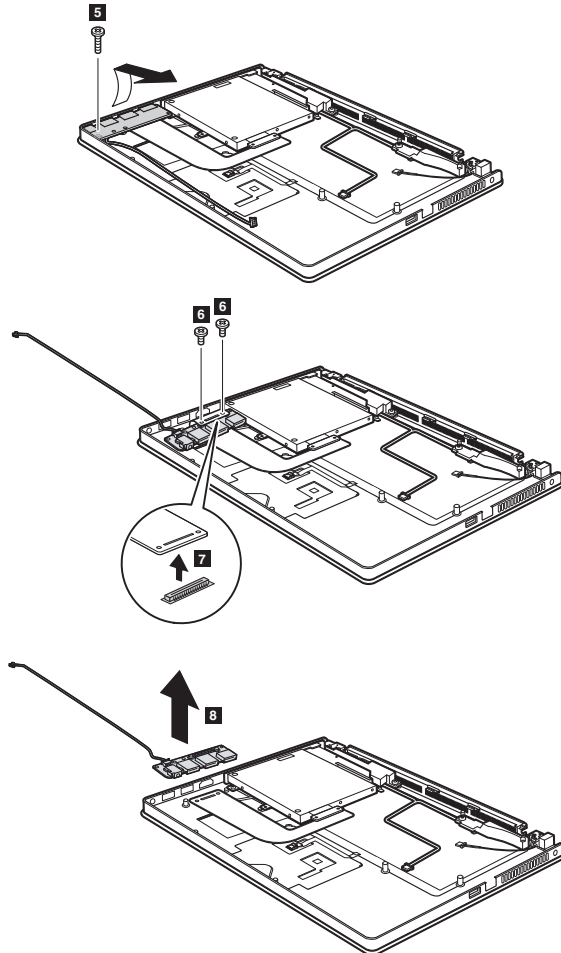
Unplug three connectors in the direction shown by arrows ■ 2, remove two screws 3, remove HDD board in the direction by arrow 4.

Step	Screw (quantity)	Color	Torque
3	M2 × 2.5 mm, flat-head, nylok-coated (2)	Black	1.6±0.24 kgfcm

Figure 6. Removal steps of USB board and HDD board (continued)

Remove one screw 5, lift the USB board a little, and then remove two screws 6 on the back of that board. Unplug the connector in the direction by arrow 7, remove USB board 8.

Step	Screw (quantity)	Color	Torque
5	M2 × 6 mm, flat-head, nylok-coated (1)	Black	1.6±0.24 kgfcm
6	M2 × 2.5 mm, flat-head, nylok-coated (2)	Black	1.6±0.24 kgfcm

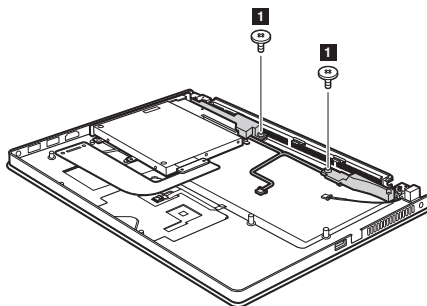
When installing: Make sure the connectors are attached firmly.

1070 Speakers and microphone (U400)

For access, remove these FRUs in order:

- "1010 Base cover (U400)" on page 74
- "1020 Battery pack (U400)" on page 76
- "1030 Hard disk drive (U400)" on page 77
- "1040 PCI Express Mini Card for wireless LAN (U400)" on page 78
- "1050 System board (U400)" on page 80
- "1060 USB board and HDD board (U400)" on page 82

Figure 7. Removal steps of speakers and microphone

Remove two screws ■.

Step	Screw (quantity)	Color	Torque
■	M2 × 3.5 mm, flat-head, nylok-coated (2)	Black	1.6±0.24 kgfcm

Remove the speakers in the direction shown by arrow 2.

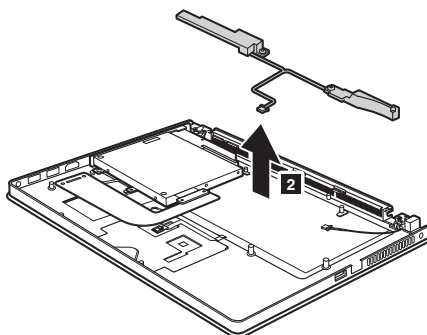
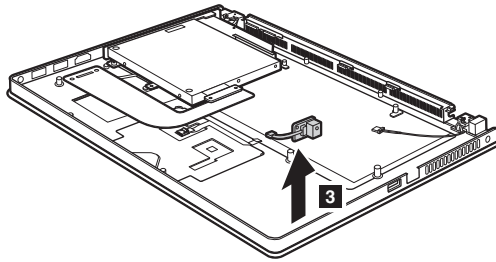



Figure 7. Removal steps of speakers and microphone (continued)

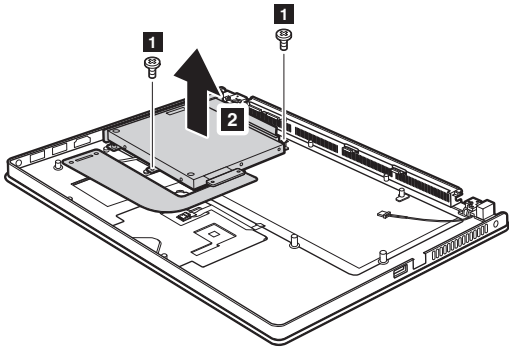
Remove the microphone in the direction by arrow 3.

When installing: Make sure that the speakers connector and microphone connector are attached firmly.

1080 Optical drive (U400)

For access, remove these FRUs in order:

- “1010 Base cover (U400)” on page 74
- “1020 Battery pack (U400)” on page 76
- “1030 Hard disk drive (U400)” on page 77
- “1040 PCI Express Mini Card for wireless LAN (U400)” on page 78
- “1050 System board (U400)” on page 80
- “1060 USB board and HDD board (U400)” on page 82
- “1070 Speakers and microphone (U400)” on page 84

Figure 8. Removal steps of optical drive

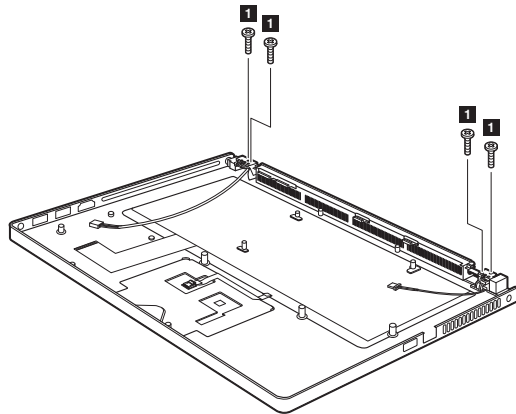
Remove two screws 1, then remove the optical drive in the direction by arrow 2.

Step	Screw (quantity)	Color	Torque
1	M2 × 2.5 mm, flat-head, nylok-coated (2)	Black	1.6±0.24 kgfcm

1090 LCD unit (U400)

For access, remove these FRUs in order:

- "1010 Base cover (U400)" on page 74
- "1020 Battery pack (U400)" on page 76
- "1030 Hard disk drive (U400)" on page 77
- "1040 PCI Express Mini Card for wireless LAN (U400)" on page 78
- "1050 System board (U400)" on page 80
- "1060 USB board and HDD board (U400)" on page 82
- "1070 Speakers and microphone (U400)" on page 84
- "1080 Optical drive (U400)" on page 86

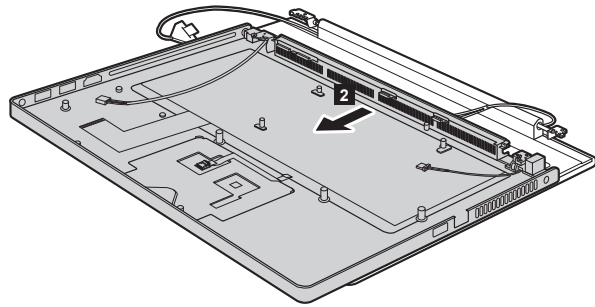
Figure 9. Removal steps of LCD unit

Remove four screws ■.

Step	Screw (quantity)	Color	Torque
■	M2 × 6 mm, flat-head, nylok-coated (4)	Black	1.6 ± 0.24 kgfcm

When installing:

- Route the antenna cables along the cable guides. As you route the cables, make sure that they are not subjected to any tension. Tension could cause the cables to be damaged by the cable guides, or a wire to be broken.
- Make sure that the LCD connector is attached firmly and make sure that you do not pinch the antenna cables when you attach the LCD assembly. Route the LCD cable along the cable guides.

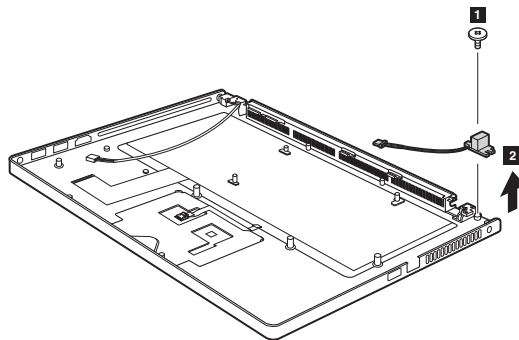
Figure 9. Removal steps of LCD unit (continued)

Remove the LCD unit in the direction shown by arrows 2.

1100 Keyboard and keyboard bezel (U400)

For access, remove these FRUs in order:

- "1010 Base cover (U400)" on page 74
- "1020 Battery pack (U400)" on page 76
- "1030 Hard disk drive (U400)" on page 77
- "1040 PCI Express Mini Card for wireless LAN (U400)" on page 78
- "1050 System board (U400)" on page 80
- "1060 USB board and HDD board (U400)" on page 82
- "1070 Speakers and microphone (U400)" on page 84
- "1080 Optical drive (U400)" on page 86
- "1090 LCD unit (U400)" on page 87

Figure 10. Removal steps of keyboard and keyboard bezel

Remove one screw 1, and then remove the power button 2.

Step	Screw (quantity)	Color	Torque
1	M2 × 3.5 mm, flat-head, nylok-coated (1)	Black	1.6±0.24 kgfcm

1110 Fan assembly and Heat Sink assembly (U400)

For access, remove these FRUs in order:

- “1010 Base cover (U400)” on page 74
- “1020 Battery pack (U400)” on page 76
- “1030 Hard disk drive (U400)” on page 77
- “1040 PCI Express Mini Card for wireless LAN (U400)” on page 78
- “1050 System board (U400)” on page 80

Figure 11. Removal steps of fan assembly and heat sink assembly

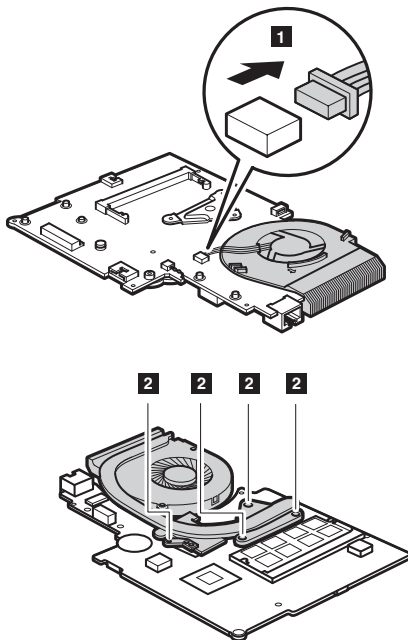
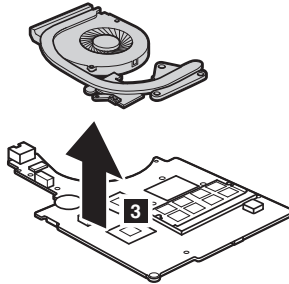
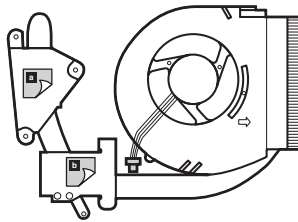
Detach the fan connector in the direction shown by arrow ■ and loosen four screws 2.

When installing: Make sure that the fan connector is attached firmly to the system board.

Figure 11. Removal steps of fan assembly and heat sink assembly (continued)

Lift the fan assembly and heat sink assembly in the direction shown by arrow **3**. Be careful not to damage the connector.

Attention: Do not handle the heat sink assembly roughly. Improper handling can cause distortion or deformation and imperfect contact with components.

When installing:

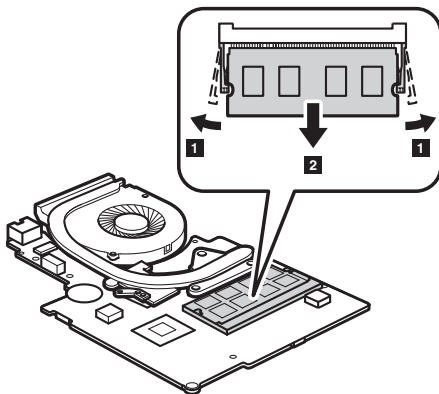
- Before you attach the fan assembly to the computer, apply thermal grease, at an amount of 0.2 grams, to the **a** **b** part shown in the figure above. Either too much or too less grease application can cause a thermal problem due to imperfect contact with a component.

1120 DIMM (U400)

For access, remove these FRUs in order:

- “1010 Base cover (U400)” on page 74
- “1020 Battery pack (U400)” on page 76
- “1030 Hard disk drive (U400)” on page 77
- “1040 PCI Express Mini Card for wireless LAN (U400)” on page 78
- “1050 System board (U400)” on page 80

Figure 12. Removal steps of DIMM

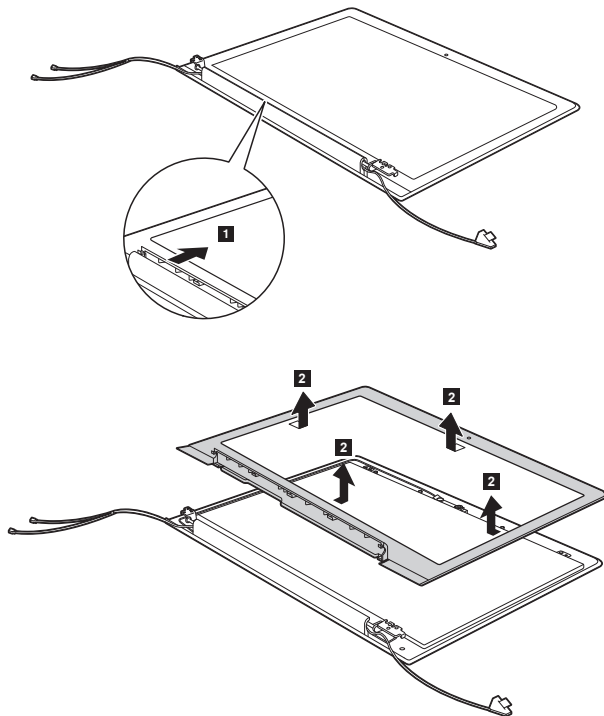
Release the two latches on both edges of the socket at the same time in the direction shown by arrows ■, and then unplug the DIMM in the direction shown by arrow 2.

When installing: Insert the notched end of the DIMM into the socket. Push the DIMM firmly, and pivot it until it snaps into the place. Make sure that it is firmly fixed in the slot and difficult to be moved.

1130 LCD front bezel (U400)

For access, remove these FRUs in order:

- "1010 Base cover (U400)" on page 74
- "1020 Battery pack (U400)" on page 76
- "1030 Hard disk drive (U400)" on page 77
- "1040 PCI Express Mini Card for wireless LAN (U400)" on page 78
- "1050 System board (U400)" on page 80
- "1060 USB board and HDD board (U400)" on page 82
- "1070 Speakers and microphone (U400)" on page 84
- "1080 Optical drive (U400)" on page 86
- "1090 LCD unit (U400)" on page 87

Figure 13. Removal steps of LCD front bezel

Carefully remove the LCD front bezel in the direction shown by arrows 1 2.

1140 LCD panel, hinges and LCD cable (U400)

For access, remove these FRUs in order:

- “1010 Base cover (U400)” on page 74
- “1020 Battery pack (U400)” on page 76
- “1030 Hard disk drive (U400)” on page 77
- “1040 PCI Express Mini Card for wireless LAN (U400)” on page 78
- “1050 System board (U400)” on page 80
- “1060 USB board and HDD board (U400)” on page 82
- “1070 Speakers and microphone (U400)” on page 84
- “1080 Optical drive (U400)” on page 86
- “1090 LCD unit (U400)” on page 87
- “1130 LCD front bezel (U400)” on page 93

Figure 14. Removal steps of LCD panel, hinges and LCD cable

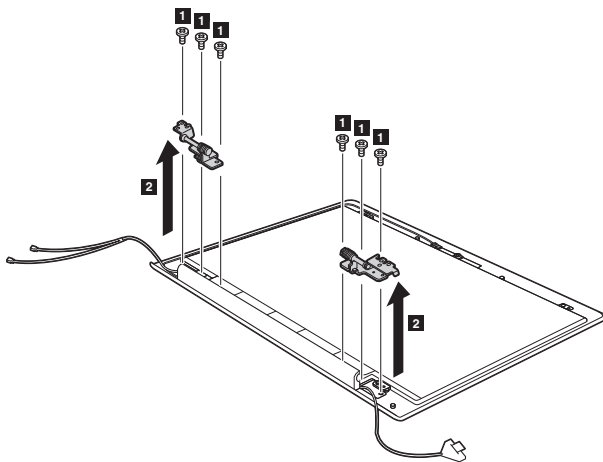
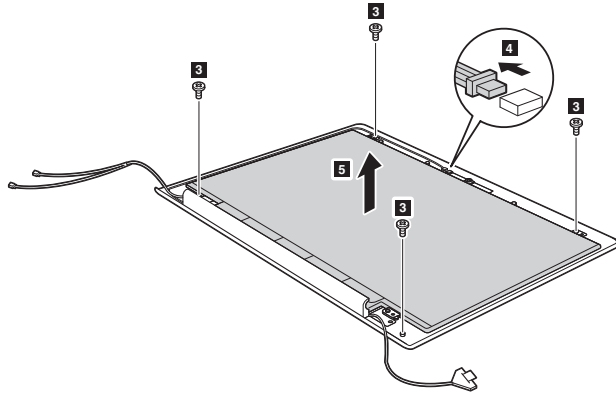
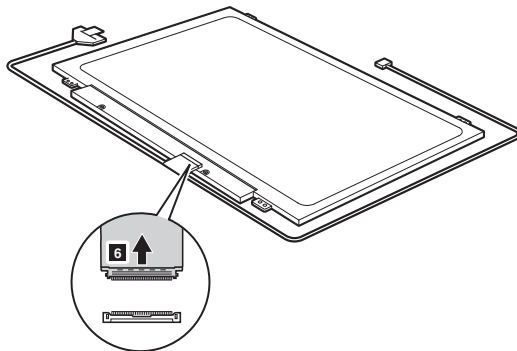
Remove six screws 1. Release the two hinges in the direction shown by arrows 2.

Step	Screw (quantity)	Color	Torque
1	M2 × 2.5 mm, flat-head, nylok-coated (6)	Black	1.6±0.24 kgfcm

Figure 14. Removal steps of LCD panel, hinges and LCD cable (continued)

Remove four screws 3, detach the integrated camera connector in the direction shown by arow 4. Remove the LCD panel in the direction shown by arrow 5.

Step	Screw (quantity)	Color	Torque
3	M2 × 2.5 mm, flat-head, nylok-coated (4)	Black	1.6±0.24 kgfcm

Note: The LCD cables are attached to the LCD panel by a metal connector.

Peel off the adhesive tape and detach the connector in the direction shown by arrow 6.

When installing: Make sure that the metal connector is attached firmly.

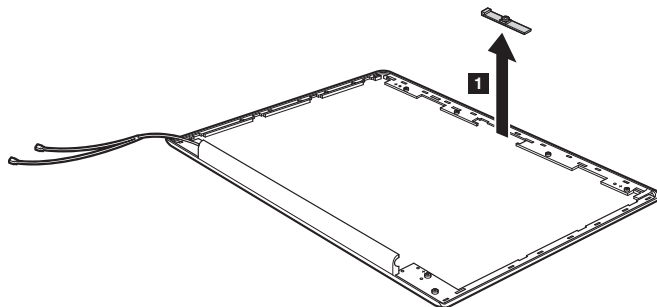
1150 Integrated camera (U400)

For access, remove these FRUs in order:

- “1010 Base cover (U400)” on page 74
- “1020 Battery pack (U400)” on page 76
- “1030 Hard disk drive (U400)” on page 77
- “1040 PCI Express Mini Card for wireless LAN (U400)” on page 78
- “1050 System board (U400)” on page 80
- “1060 USB board and HDD board (U400)” on page 82
- “1070 Speakers and microphone (U400)” on page 84
- “1080 Optical drive (U400)” on page 86
- “1090 LCD unit (U400)” on page 87
- “1130 LCD front bezel (U400)” on page 93
- “1140 LCD panel, hinges and LCD cable (U400)” on page 94

Figure 15. Removal steps of integrated camera

Note: The integrated camera is stuck on the top center of the LCD cover.

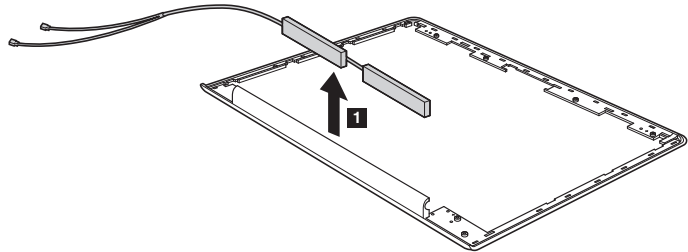
Remove the integrated camera from the LCD cover ■.

When installing: Stick the integrated camera to the top center of the LCD cover and ajust the placement of it to make sure the connector is attached firmly.

1160 Antenna assembly and LCD cover (U400)

For access, remove these FRUs in order:

- “1010 Base cover (U400)” on page 74
- “1020 Battery pack (U400)” on page 76
- “1030 Hard disk drive (U400)” on page 77
- “1040 PCI Express Mini Card for wireless LAN (U400)” on page 78
- “1050 System board (U400)” on page 80
- “1060 USB board and HDD board (U400)” on page 82
- “1070 Speakers and microphone (U400)” on page 84
- “1080 Optical drive (U400)” on page 86
- “1090 LCD unit (U400)” on page 87
- “1130 LCD front bezel (U400)” on page 93
- “1140 LCD panel, hinges and LCD cable (U400)” on page 94
- “1150 Integrated camera (U400)” on page 96

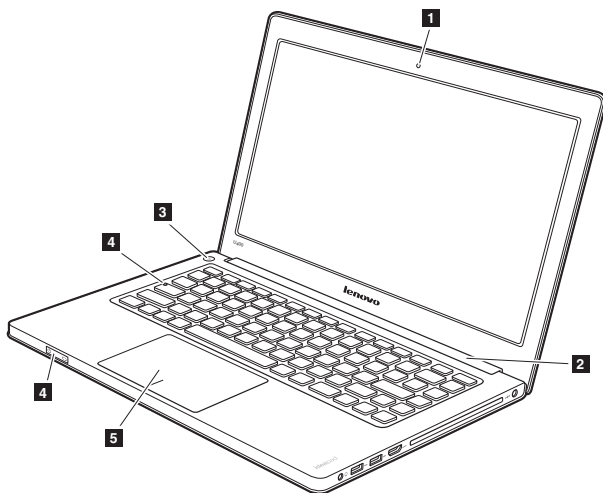
Figure 16. Removal steps of antenna assembly and LCD cover

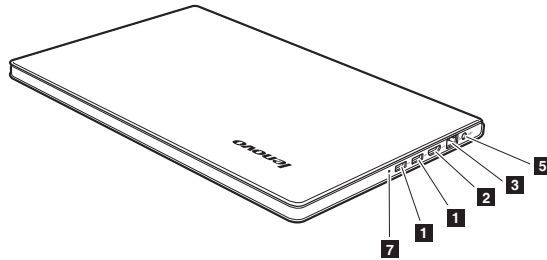
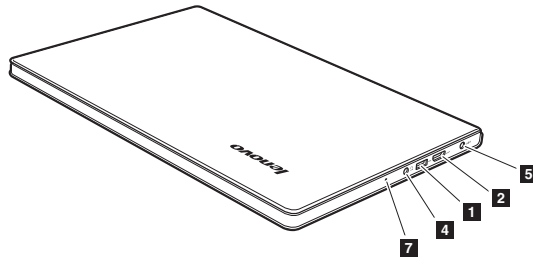
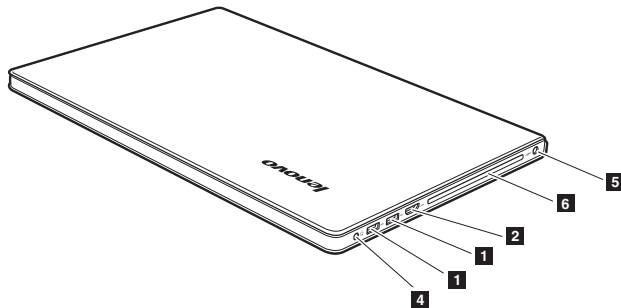
Remove the antenna assembly in the direction shown by arrows ■.

When installing: Route the antenna cables along the cable guides and secure the antenna boards with adhesive tapes. As you route the cables, make sure that they are not subjected to any tension. Tension could cause the cables to be damaged by the cable guides, or a wire to be broken.

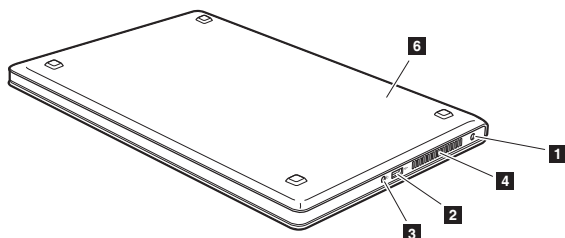
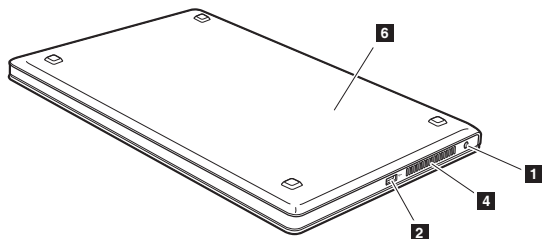
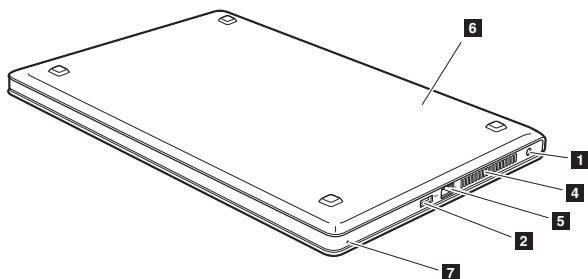
Locations

Note: The illustrations used in this section are of the Lenovo ideapad U400, unless otherwise stated.

Front view

1 Integrated camera (Select models only)
2 Wireless module antennas (Select models only)
3 Power button
4 System status indicators
Note: For the description of each indicator, see “Status indicators” on page 29.
5 Touchpad

Right-side view

■ USB port
2 HDMI port
3 RJ-45 port
4 Headphone mic combo jack
5 AC power adapter jack
6 Optical drive
7 Built-in microphone

Bottom and Left-side view

- 1 OneKey Rescue system button
- 2 USB port
- 3 Headphone mic combo jack
- 4 Fan louvers
- 5 RJ-45 port
- 6 Base cover
- 7 Built-in microphone

Parts list

This section presents the following service parts:

Notes:

- Each FRU is available for all types or models, unless specific types or models are specified.

Overall

U300

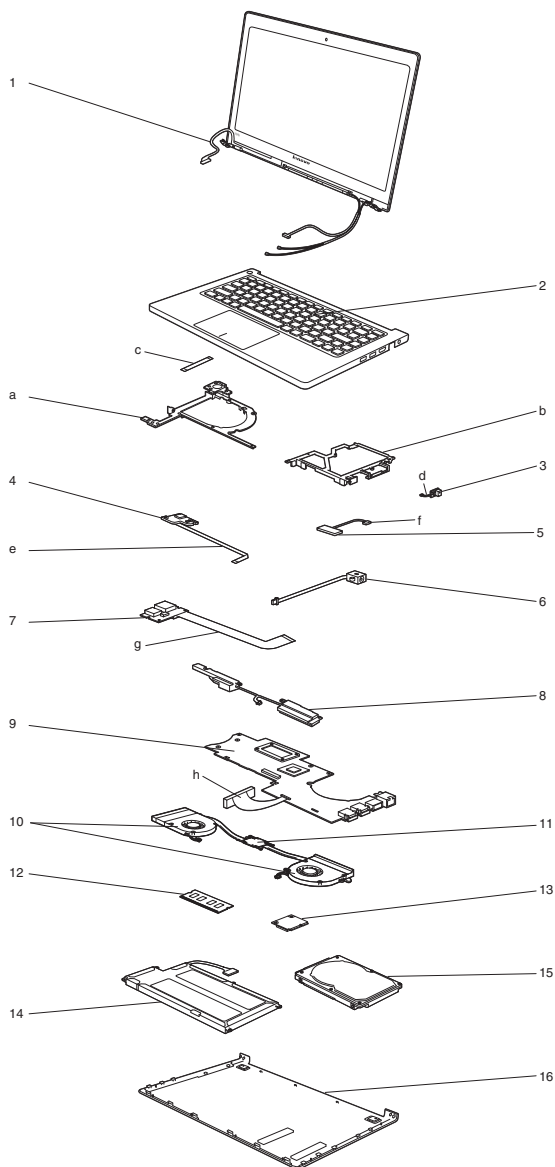



Table 5. Parts list—Overall

No.	FRU	FRU no.
a-h	See “Miscellaneous parts” on page 116.	
1	Panel 13.3" CMI	TBD
2	Keyboard (see “Keyboard” on page 113.)	
3	MICKEY Micphone Board	11014115
4	MICKEY Power Board	31052169
5	MICKEY LED Board	31052170
6	MICKEY DC-IN Jack W/Cable	31052176
7	MICKEY USB Board	11014114
8	MICKEY Speaker(L+R)W/Cable	31052179
9	MICKEY MB I7-2620 2.7G W/HDMI	11014107
9	MICKEY MB I3-2330 2.2G W/HDMI	11014108
9	MICKEY MB I5-2540 2.6G W/HDMI	11014109
9	MICKEY MB I5-2520 2.5G W/HDMI	11014110
9	MICKEY MB I5-2430 2.4G W/HDMI	11014111
9	MICKEY MB I3-2350 2.3G W/HDMI	11014112
10	MICKEY Fan	31052181
11	MICKEY Thermal	31052180
12	DDRIII 1333 1GB, SAM M471B2873GB0-CH9 DDR3 1333 1GB	11013084
12	DDRIII 1333 1GB, HMT312S6BFR6C-H9 N0 (Rev Vega/2Gb/44nm)	11012321
12	DDRIII 1333 2GB, SAM M471B5773DH0-CH9 DDR3 1333 2GB	11012808
12	DDRIII 1333 2GB, HYN HMT325S6BFR8C-H9 N0 DDR3 1333 2GB	11012197
12	DDRIII 1333 2GB, RMT3010EC58E8F-1333(C/2Gb/40nm)	11200060
12	DDRIII 1333 2GB, RMT3010KC58E8F-1333(Samsung C/2Gb/46nm)	11013171
12	DDRIII 1333 2GB, SP321NH08HAF (C/2Gb/45nm)	11200058
12	DDRIII 1333 2GB, NAN NT2GC64B88B0NS-CG DDR3 1333 2GB	11012761
12	DDRIII 1333 4GB, SAM M471B5273DH0-CH9 DDR3 1333 4GB	11012807
12	DDRIII 1333 4GB, RMT3020EC58E9F-1333(C/2Gb/40nm)	11200061
12	DDRIII 1333 4GB, EBJ41UF8BCS0-DJ-F(Rev C/2Gb/40nm)	11012945
12	DDRIII 1333 4GB, HYN HMT351S6BFR8C-H9 N0 DDR3 1333 4GB	11012199
12	On Board DDRIII 1333 2GB, EDJ2116DEBG-DJ-F(40nm)	TBD
12	On Board DDRIII 1333 2GB, MP41J128M16HA-15E:D	TBD
12	On Board DDRIII 1333 2GB, K4B2G1646C-HCH9/K0	TBD
12	On Board DDRIII 1333 2GB, H5TQ2G63BFR(Vega/44nm)	TBD
12	On Board DDRIII 1333 4GB, EDJ4216BASE-DJ-F(40nm) (CS:Now)	TBD
12	On Board DDRIII 1333 4GB, TBD(CS:Q2,11)	TBD
12	On Board DDRIII 1333 4GB, H5TQ4G63MFR(Gemma/38nm)(CS:Q2,11/MP:Q3,11)	TBD

Table 5. Parts list—Overall (continued)

No.	FRU	FRU no.
13	WiFi 1x1 BGN, Intel 1000N MOW M PCIE NB HMC	20002329
13	WiFi 2x2 BGN+BT, Cbt BCM43225HMB BGN+BT HMC	20002511
13	WiFi 2x2 BGN+BT, Liteon WB197 BGN+BT HMC	20002520
14	59WH 2S2P 8060mAh,Polymer, U3 SMP/ATL L10M4P11 2S2P 59Wh bty	121500001
15	WD5000BPVT-24HXZT1 5400RPM 500G HDD	16004846
15	Seagate ST9500325AS 500G 9NB HDD	16004189
15	HT HTS547550A9E384 5400RPM 500G HDD	16200006
15	Toshiba MK5065GSX 5400RPM 500G HDD	16004643
15	Toshiba MK6475GSX 5400RPM 640G HDD	16005335
15	WD6400BPVT-24HXZT1 5400RPM 640G HDD	16004847
15	HT HTS547564A9E384 5400RPM 640G HDD	16200007
15	Seagate ST9640423AS 5400RPM 640G HDD	16200009
15	WD WD7500BPVT-24HXZT1 5400RPM 750G HDD	16004848
15	Toshiba MK7575GSX 5400RPM 750G HDD	16005334
15	HT HTS547575A9E384 5400RPM 750G HDD	16200008
15	Seagate ST9750423AS 5400RPM 750G HDD	16005333
15	Seagate ST9500423AS 7200RPM 500G HDD	16200020
15	Hitachi HTS725050A9A364 7200RPM500G HDD	16004531
15	WD WD5000BPKT 7200RPM 500G HDD	16200004
15	Seagate ST9750420AS 7200RPM 750G HDD	16005332
15	WD WD7500BPKT 7200RPM 750G HDD	16200005
16	MICKEY Lower Case	31052171
—	AC adapter (see “AC adapters” on page 118).	

U300s

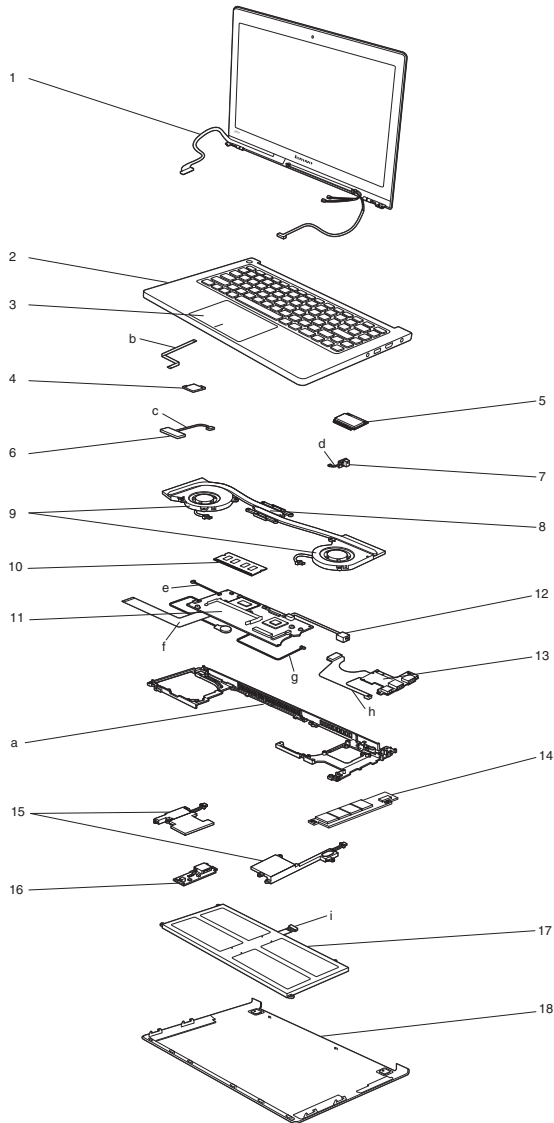



Table 6. Parts list—Overall

No.	FRU	FRU no.
a-i	See “Miscellaneous parts” on page 116.	
1	Panel, 13.3", N133BGE-M41 HD G LED1 NB panel	TBD
2	MINNIE Upper Case Gray W/KB-AR	31052458
2	MINNIE Upper Case Gray W/KB-BE	31052459
2	MINNIE Upper Case Gray W/KB-BG	31052456
2	MINNIE Upper Case Gray W/KB-BR	31052451
2	MINNIE Upper Case Gray W/KB-CB	31052452
2	MINNIE Upper Case Gray W/KB-CZ	31052439
2	MINNIE Upper Case Gray W/KB-DU	31052448
2	MINNIE Upper Case Gray W/KB-FR	31052464
2	MINNIE Upper Case Gray W/KB-GE	31052453
2	MINNIE Upper Case Gray W/KB-GR	31052438
2	MINNIE Upper Case Gray W/KB-HE	31052454
2	MINNIE Upper Case Gray W/KB-HU	31052457
2	MINNIE Upper Case Gray W/KB-IN	31052455
2	MINNIE Upper Case Gray W/KB-IS	31052445
2	MINNIE Upper Case Gray W/KB-IT	31052441
2	MINNIE Upper Case Gray W/KB-JP	31052436
2	MINNIE Upper Case Gray W/KB-KO	31052442
2	MINNIE Upper Case Gray W/KB-LA	31052440
2	MINNIE Upper Case Gray W/KB-ND	31052461
2	MINNIE Upper Case Gray W/KB-PO	31052437
2	MINNIE Upper Case Gray W/KB-RU	31052463
2	MINNIE Upper Case Gray W/KB-SF	31052446
2	MINNIE Upper Case Gray W/KB-SK	31052444
2	MINNIE Upper Case Gray W/KB-SP	31052443
2	MINNIE Upper Case Gray W/KB-TA	31052450
2	MINNIE Upper Case Gray W/KB-TU	31052462
2	MINNIE Upper Case Gray W/KB-TW	31052447
2	MINNIE Upper Case Gray W/KB-UI	31052460
2	MINNIE Upper Case Gray W/KB-UK	31052435
2	MINNIE Upper Case Gray W/KB-US	31052434
2	MINNIE Upper Case Black W/KB-US	25013757
2	MINNIE Upper Case Black W/KB-UK	90200001
2	MINNIE Upper Case Black W/KB-JP	90200002
2	MINNIE Upper Case Black W/KB-CB	25013758
2	MINNIE Upper Case Black W/KB-AR	90200004
2	MINNIE Upper Case Black W/KB-RU	90200003
3	MINNIE Touchpad Module Black	31052656
3	MINNIE Touchpad Module Light-Gray	31052465
4	MINNIE Power Board	31052186
5	WiFi 1x1 BGN, Intel 1000N MOW M PCIE NB HMC	20002329
5	WiFi 2x2 BGN+BT, Cbt BCM43225HMB BGN+BT HMC	20002511
5	WiFi 2x2 BGN+BT, Liteon WB197 BGN+BT HMC	20002520

Table 6. Parts list—Overall (continued)

No.	FRU	FRU no.
6	MINNIE LED Board	31052187
7	MINNIE Micphone Board	11014124
8	MINNIE Thermal	31052201
9	MINNIE CPU Fan	31052203
9	MINNIE System Fan	31052204
10	DDRIII 1333 2GB, SAM M471B5773DH0-CH9 DDR3 1333 2GB	11012808
10	DDRIII 1333 2GB, HYN HMT325S6BFR8C-H9 N0 DDR3 1333 2GB	11012197
10	DDRIII 1333 2GB, RMT3010EC58E8F-1333(C/2Gb/40nm)	11200060
10	DDRIII 1333 2GB, RMT3010KC58E8F-1333(Samsung C/2Gb/46nm)	11013171
10	DDRIII 1333 2GB, SP321NH08HAF (C/2Gb/45nm)	11200058
10	DDRIII 1333 2GB, NAN NT2GC64B88B0NS-CG DDR3 1333 2GB	11012761
10	DDRIII 1333 4GB, SAM M471B5273DH0-CH9 DDR3 1333 4GB	11012807
10	DDRIII 1333 4GB, RMT3020EC58E9F-1333(C/2Gb/40nm)	11200061
10	DDRIII 1333 4GB, EBJ41UF8BCS0-DJ-F(Rev C/2Gb/40nm)	11012945
10	DDRIII 1333 4GB, HYN HMT351S6BFR8C-H9 N0 DDR3 1333 4GB	11012199
11	MINNIE MB I7-2637 1.7G W/HDMI	11014116
11	MINNIE MB I3-2357 1.3G W/HDMI	11014118
11	MINNIE MB I5-2467 1.6G W/HDMI	11014119
11	MINNIE MB I7-2677 1.8G W/HDMI	11014120
11	MINNIE MB I5-2557 1.7G W/HDMI	11014206
12	MINNIE DC-IN Jack W/Cable	31052193
13	MINNIE IO Board	11014123
13	MINNIE IO Board Black	31052653
14	Nandflash, 128Gbit MLC, Micron, MT29F128G08CMAAAC5:A	TBD
14	Nandflash, 128Gbit MLC, Hynix, H27QDG8JEA	TBD
14	Nandflash, 256Gbit MLC, Micron, MT29F256G08CMAAAC5:A	TBD
14	Nandflash, 256Gbit MLC, Hynix, H27UEG8YEA	TBD
15	MINNIE Speaker W/Cable Light	31052200
15	MINNIE Speaker W/Cable Right	31052199
16	MINNIE USB Board	11014122
16	MINNIE USB Board Black	11014238
17	57WH 4S1P 3890mAh Polymer, U3s SMP/ATL L10M4P12 4S1P 57Wh bty	121500002
18	MINNIE Lower Case	31052188
18	MINNIE Lower Case Black	31052655
—	AC adapter (see “AC adapters” on page 118).	

U400

1
3
2
4
k
a
c
b
5
g
6
d
l
e
f
7
m
8
9
n
10
h
11
12
i
13
14
j
15
16

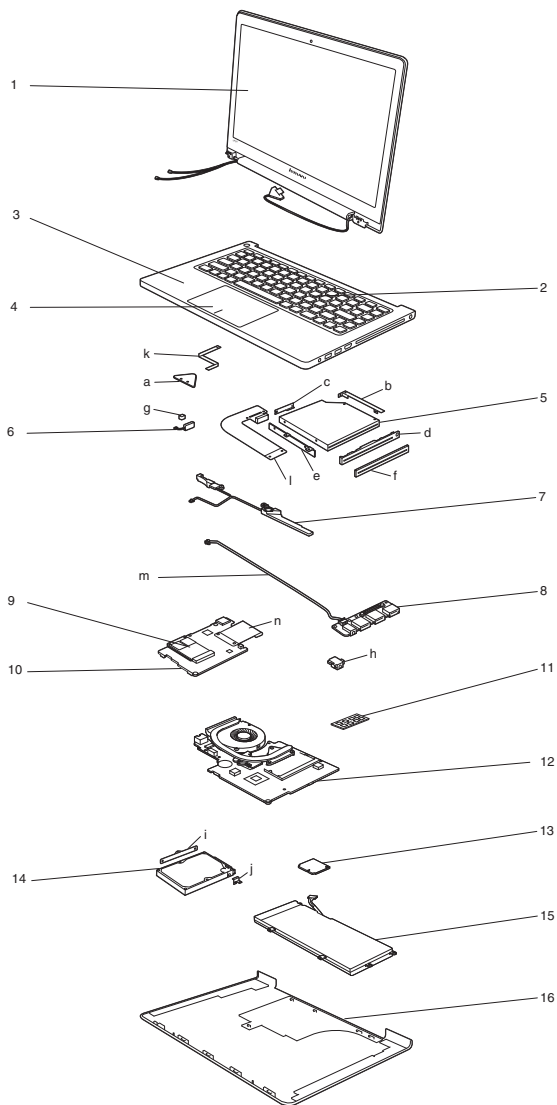



Table 7. Parts list—Overall

No.	FRU	FRU no.
a-l	See “Miscellaneous parts” on page 116.	
1	LCD unit (see “LCD FRUs” on page 111.)	
2	Keyboard (see “Keyboard” on page 113.)	
3	LU47 Upper Case W/EN KB/DC/POW Cable	31052386
3	LU47 Upper Case W/UK KB/DC/POW Cable	31052387
3	LU47 Upper Case W/LA KB/DC/POW Cable	31052388
4	LU47 TouchPad Module	31052161
5	ODD, HLDS GS30N Slot in Rambo	25013479
5	ODD, PSN UJ8A7 Slot in Rambo	25013477
6	LU47 Micphone	31052053
7	LU47 Speaker(Left+Right)	31052059
8	LU47 IO Board	11014050
8	LU47 10L IO Board	90200006
9	Samsung MZMPA032HMCD 32G mSATA SSD	16005083
9	Ramaxel RMS22MMMT032G mSATA 32G SSD	16200054
10	LU47 HDD Board	11014049
10	LU47 10L HDD Board	90200005
11	DDRIII 1333 2GB, SAM M471B5773DH0-CH9 DDR3 1333 2GB	11012808
11	DDRIII 1333 2GB, HYN HMT325S6BFR8C-H9 N0 DDR3 1333 2GB	11012197
11	DDRIII 1333 2GB, RMT3010EC58E8F-1333(C/2Gb/40nm)	11200060
11	DDRIII 1333 2GB, RMT3010KD58E8F-1333(Rev D /2Gb/35nm)	TBD
11	DDRIII 1333 2GB, SP321NH08HAF (C/2Gb/45nm)	11200058
11	DDRIII 1333 2GB, NAN NT2GC64B88B0NS-CG DDR3 1333 2GB	11012761
11	DDRIII 1333 4GB, SAM M471B5273DH0-CH9 DDR3 1333 4GB	11012807
11	DDRIII 1333 4GB, RMT3020EC58E9F-1333(C/2Gb/40nm)	11200061
11	DDRIII 1333 4GB, EBJ41UF8BCS0-DJ-F(Rev C/2Gb/40nm)	11012945
11	DDRIII 1333 4GB, HYN HMT351S6BFR8C-H9 N0 DDR3 1333 4GB	11012199
12	LU47 MB DIS i3-2330 2.2G W/APS/HDMI/THM	11014051
12	LU47 MB DIS i5-2430 2.4G W/APS/HDMI/THM	11014052
12	LU47 MB DIS i7-2620 2.7G W/APS/HDMI/THM	11014053
12	LU47 MB 10L i3-2330 2.2G W/APS/HDMI/THM	90000004
12	LU47 MB 10L i5-2430 2.4G W/APS/HDMI/THM	90000005
12	LU47 MB 10L i7-2620 2.7G W/APS/HDMI/THM	90000006
13	WiFi 1x2 bgn + BT3.0, Intel 1030 BGN+BT M PCIE HMC	20200030
13	WiFi 2x2 BGN+BT, Cbt BCM43225HMB BGN+BT HMC	20002511
13	WiFi 2x2 BGN+BT, Liteon WB197 BGN+BT HMC	20002520
14	WD WD5000BPVT-24HXZ 5400RPM 500G HDD	16004846
14	Seagate ST9500325AS 500G 9NB HDD	16004189
14	HT HTS547550A9E384 5400RPM 500G HDD	16200006
14	Toshiba MK5065GSX 5400RPM 500G HDD	16004643
14	HGST HTS545050A7E380 5400PRM7mm 500G HDD	16200067

Table 7. Parts list—Overall (continued)

No.	FRU	FRU no.
14	WD WD7500BPVT-24HXZ 5400RPM 750G	16004848
14	Toshiba MK7575GSX 5400RPM 750G HDD	16005334
14	HT HTS547575A9E384 5400RPM 750G HDD	16200008
14	Seagate ST9750423AS 5400RPM 750G HDD	16005333
14	Seagate ST9500423AS 7200RPM 500G HDD	16200020
14	Hitachi HTS727550A9E364 7200RPM 500G HDD	16200058
14	WD WD5000BPKT 7200RPM 500G HDD	16200004
14	Seagate ST9750420AS 7200RPM 750G HDD	16005332
14	WD WD7500BPKT 7200RPM 750G HDD	16200005
14	Hitachi HTS727575A9E364 7200RPM 750G HDD	16200060
15	Battery, Polymer 54Wh,4960mAh, U4 Sony L10N6P11 3S2P 54Wh bty	121500003
15	Battery, Polymer 54Wh,3700mAh, U4 Celx/ATL L10C4P11 4S1P 54Wh bty	121500004
16	LU47 Lower Case Dark-Gray	31052031
—	AC adapter (see “AC adapters” on page 118).	

LCD FRUs

In Lenovo IdeaPad U400, there are following types of LCDs.

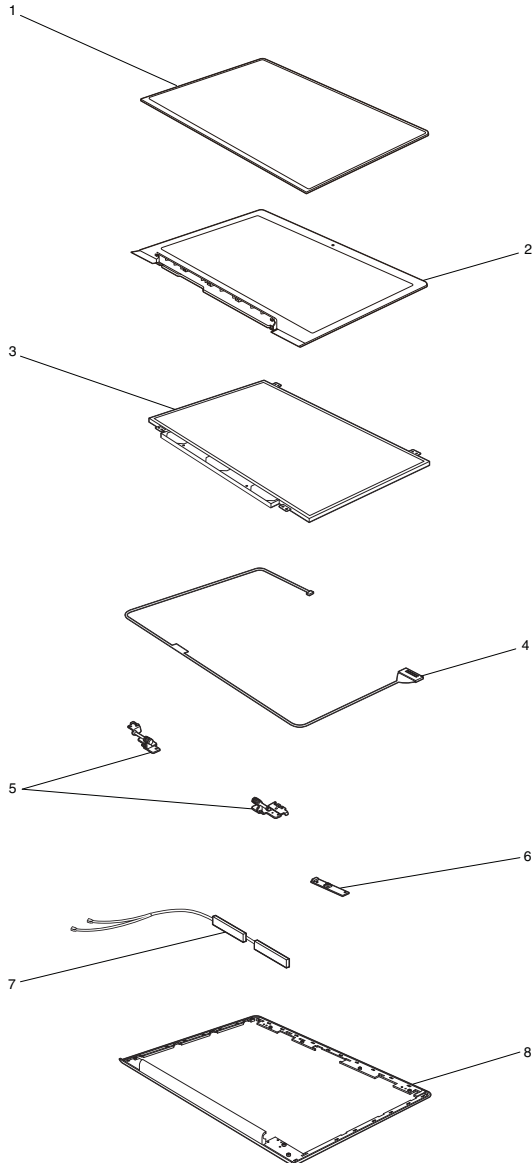
- “14.0-in. HD TFT”

14.0-in. HD TFT

Table 8. Parts list—14.0-in. HD TFT

No.	FRU	FRU no.
1	LU47 LCD Bezel Rubber Dark-Gray	31052037
2	LU47 LCD Bezel W/Camera Hole Light-Gray	31052029
3	Panel, 14.0", AUO, B140XW03 V0	18003943
3	Panel, 14.0", CMI, N140BGE-L41	18004804
3	Panel, 14.0", LGD, LP140WH2-TLQ1	18003937
3	Panel, 14.0", SEC, LTN140AT20-L01	18004803
4	LU47 LCD Cable W/Camera Cable	31052048
5	LU47 Hinge Left	31052050
5	LU47 Hinge Right	31052051
6	LU47 Camera 1.3M	31052049
7	LU47 Antenna*2 Main+AUX	31052052
8	LU47 LCD Cover Dark-Gray	31052030

Keyboard

Table 9. Parts list—Keyboard

		P/N
Sunrex (U300/U300s)	JMET3SCZSK85keyBLKKeyKBD	25200278
	JMET3SBulgarian85keyBLKKeyKBD	25200277
	JMET3SUI84keyBLKKeyKBD	25200276
	JMET3SSwiss85keyBLKKeyKBD	25200275
	JMET3SSLN85keyBLKKeyKBD	25200274
	JMET3SIceland85keyBLKKeyKBD	25200273
	JMET3SBelgian85keyBLKKeyKBD	25200272
	JMET3SNordic85keyBLKKeyKBD	25200271
	JMET3SHungarian85keyBLKKeyKBD	25200270
	JMET3SHebrewB84keyBLKKeyKBD	25200269
	JMET3SGreek84keyBLKKeyKBD	25200268
	JMET3SDutch85keyBLKKeyKBD	25200267
	JMET3SJapan88keyBLKKeyKBD	25200266
	JMET3SBrazil85keyBLKKeyKBD	25200265
	JMET3SArabic84keyBLKKeyKBD	25200264
	JMET3SGerman85keyBLKKeyKBD	25200263
	JMET3SFrench85keyBLKKeyKBD	25200262
	JMET3SRussian84keyBLKKeyKBD	25200261
	JMET3STC84keyBLKKeyKBD	25200260
	JMET3SKorean84keyBLKKeyKBD	25200259
	JMET3SENCanada85keyBLKKeyKBD	25200258
	JMET3SLatinSPA85keyBLKKeyKBD	25200257
	JMET3SPortuguese85keyBLKKeyKBD	25200256
	JMET3SThai84keyBLKKeyKBD	25200255
	JMET3STurkish85keyBLKKeyKBD	25200254
	JMET3SSpanish85keyBLKKeyKBD	25200253
	JMET3SItalian85keyBLKKeyKBD	25200252
	JMET3SUK85keyBLKKeyKBD	25200251
	JMET3SUS84keyBLKKeyKBD	25200250
Darfon (U300/U300s)	DFT3SCZSK85keyBLKKeyKBD	25200307
	DFT3SBulgarian85keyBLKKeyKBD	25200306
	DFT3SUI84keyBLKKeyKBD	25200305
	DFT3SSwiss85keyBLKKeyKBD	25200304
	DFT3SSLN85keyBLKKeyKBD	25200303
	DFT3SIceland85keyBLKKeyKBD	25200302
	DFT3SBelgian85keyBLKKeyKBD	25200301
	DFT3SNordic85keyBLKKeyKBD	25200300
	DFT3SHungarian85keyBLKKeyKBD	25200299
	DFT3SHebrewB84keyBLKKeyKBD	25200298
	DFT3SGreek84keyBLKKeyKBD	25200297
	DFT3SDutch85keyBLKKeyKBD	25200296
	DFT3SJapan88keyBLKKeyKBD	25200295
	DFT3SBrazil85keyBLKKeyKBD	25200294
	DFT3SArabic84keyBLKKeyKBD	25200293

Table 9. Parts list—Keyboard (continued)

		P/N
Darfon (U300/ U300s)	DFT3SGerman85keyBLKKeyKBD	25200292
	DFT3SFrench85keyBLKKeyKBD	25200291
	DFT3SRussian84keyBLKKeyKBD	25200290
	DFT3STC84keyBLKKeyKBD	25200289
	DFT3SKorean84keyBLKKeyKBD	25200288
	DFT3SENCanada85keyBLKKeyKBD	25200287
	DFT3SLatinSPA85keyBLKKeyKBD	25200286
	DFT3SPortuguese85keyBLKKeyKBD	25200285
	DFT3SThai84keyBLKKeyKBD	25200284
	DFT3STurkish85keyBLKKeyKBD	25200283
	DFT3SSpanish85keyBLKKeyKBD	25200282
	DFT3SItalian85keyBLKKeyKBD	25200281
	DFT3SUK85keyBLKKeyKBD	25200280
	DFT3SUS84keyBLKKeyKBD	25200279
Sunrex (U400)	JMET3S7CZSK85keyBLKKeyKBD	25200220
	JMET3S7TC84keyBLKKeyKBD	25200202
	JMET3S7Russian84keyBLKKeyKBD	25200203
	JMET3S7French85keyBLKKeyKBD	25200204
	JMET3S7German85keyBLKKeyKBD	25200205
	JMET3S7Arabic84keyBLKKeyKBD	25200206
	JMET3S7Brazil85keyBLKKeyKBD	25200207
	JMET3S7Japan88keyBLKKeyKBD	25200208
	JMET3S7Dutch85keyBLKKeyKBD	25200209
	JMET3S7Bulgarian85keyBLKKeyKBD	25200219
	JMET3S7UI84keyBLKKeyKBD	25200218
	JMET3S7Swiss85keyBLKKeyKBD	25200217
	JMET3S7SLN85keyBLKKeyKBD	25200216
	JMET3S7Iceland85keyBLKKeyKBD	25200215
	JMET3S7Belgian85keyBLKKeyKBD	25200214
	JMET3S7Nordic85keyBLKKeyKBD	25200213
	JMET3S7Hungarian85keyBLKKeyKBD	25200212
	JMET3S7HebrewB84keyBLKKeyKBD	25200211
	JMET3S7Greek84keyBLKKeyKBD	25200210
	JMET3S7ENCanada85keyBLKKeyKBD	25200200
	JMET3S7Korean84keyBLKKeyKBD	25200201
	JMET3S7LatinSPA85keyBLKKeyKBD	25200199
	JMET3S7Portuguese85keyBLKKeyKBD	25200198
	JMET3S7Thai84keyBLKKeyKBD	25200197
	JMET3S7Turkish85keyBLKKeyKBD	25200196
	JMET3S7Spanish85keyBLKKeyKBD	25200195
	JMET3S7Italian85keyBLKKeyKBD	25200194
	JMET3S7UK85keyBLKKeyKBD	25200193
	JMET3S7US84keyBLKKeyKBD	25200192
Darfon (U400)	DFT3S7CZSK85keyBLKKeyKBD	25200249
	DFT3S7Bulgarian85keyBLKKeyKBD	25200248
	DFT3S7UI84keyBLKKeyKBD	25200247
	DFT3S7Swiss85keyBLKKeyKBD	25200246

Table 9. Parts list—Keyboard (continued)

		P/N
Darfon (U400)	DFT3S7SLN85keyBLKKeyKBD	25200245
	DFT3S7Iceland85keyBLKKeyKBD	25200244
	DFT3S7Belgian85keyBLKKeyKBD	25200243
	DFT3S7Nordic85keyBLKKeyKBD	25200242
	DFT3S7Hungarian85keyBLKKeyKBD	25200241
	DFT3S7HebrewB84keyBLKKeyKBD	25200240
	DFT3S7Greek84keyBLKKeyKBD	25200239
	DFT3S7Dutch85keyBLKKeyKBD	25200238
	DFT3S7Japan88keyBLKKeyKBD	25200237
	DFT3S7Brazil85keyBLKKeyKBD	25200236
	DFT3S7Arabic84keyBLKKeyKBD	25200235
	DFT3S7German85keyBLKKeyKBD	25200234
	DFT3S7French85keyBLKKeyKBD	25200233
	DFT3S7Russian84keyBLKKeyKBD	25200232
	DFT3S7TC84keyBLKKeyKBD	25200231
	DFT3S7Korean84keyBLKKeyKBD	25200230
	DFT3S7ENCanada85keyBLKKeyKBD	25200229
	DFT3S7LatinSPA85keyBLKKeyKBD	25200228
	DFT3S7Portuguese85keyBLKKeyKBD	25200227
	DFT3S7Thai84keyBLKKeyKBD	25200226
	DFT3S7Turkish85keyBLKKeyKBD	25200225
	DFT3S7Spanish85keyBLKKeyKBD	25200224
	DFT3S7Italian85keyBLKKeyKBD	25200223
	DFT3S7UK85keyBLKKeyKBD	25200222
	DFT3S7US84keyBLKKeyKBD	25200221

Miscellaneous parts

U300

Table 10. Parts list—Miscellaneous parts

FRU	P/N
System miscellaneous parts:	
• (*a*) MICKEY Frame left	31052182
• (*b*) MICKEY Frame Right	31052183
Cable miscellaneous parts:	
• (*c*) MICKEY TouchPad Cable	31052174
• (*d*) MICKEY Minphone Board Cable	31052177
• (*e*) MICKEY Power Board Cable	31052172
• (*f*) MICKEY LED Board Cable	31052173
• (*g*) MICKEY USB Board Cable	31052175
• (*h*) MICKEY HDD Board W/Cable-SATA	31052178
Note: Italicized letters in parentheses are references to the exploded view in "Overall" on page 102 .	

U300s

Table 11. Parts list—Miscellaneous parts

FRU	P/N
System miscellaneous parts:	
• (*a*) MINNIE Frame	31052205
• (*a*) MINNIE Frame Black	31052654
Cable miscellaneous parts:	
• (*b*) MINNIE TouchPad Cable	31052191
• (*c*) MINNIE LED Board Cable	31052190
• (*d*) MINNIE Minphone Board Cable	31052195
• (*e*) MINNIE Power Board Cable	31052189
• (*f*) MINNIE USB Board Cable	31052192
• (*g*) MINNIE SSD Cable	31052196
• (*h*) MINNIE IO Board Cable	31052194
• (*i*) MINNIE Battery Cable	31052197
Note: Italicized letters in parentheses are references to the exploded view in "Overall" on page 102 .	

U400

Table 12. Parts list—Miscellaneous parts

FRU	P/N
System miscellaneous parts:	
• (*a*) LU47 TouchPad Bracket	31052162
• (*b*) LU47 ODD Bracket Right	31052034
• (*c*) LU47 ODD Bracket Back	31052032
• (*d*) LU47 ODD Bezel Slot-In Light-Gray	31052035
• (*e*) LU47 ODD Bracket Left	31052033
• (*f*) LU47 ODD Rubber	31052056
• (*g*) LU47 Micphone Rubber	31052057
• (*h*) LU47 Audio Breaket	31052055
• (*i*) LU47 HDD Bracket Large	31052028
• (*j*) LU47 HDD Bracket Small	31052027
Cable miscellaneous parts:	
• (*k*) LU47 TouchPad Cable	31052022
• (*l*) LU47 IO Board Cable1 40PIN	31052025
• (*m*) LU47 IO Board Cable2 7PIN	31052024
• (*n*) LU47 HDD Board Cable	31052026
Note: Italicized letters in parentheses are references to the exploded view in “Overall” on page 102 .	

AC adapters

Table 13. Parts list—AC adapters

FRU	P/N
65W, Delta ADP-65KH BD 20V/3.25A Adapter	36001929
65W, Liteon PA-1650-56LC20V3.25A Adapter	36001651
65W, Brazil PA-1650-52LB Adapter	36001714
65W, Chicony CPA-A065 20V3.25A Adapter(330PF)	36001943
Slim 65W, Delta 20V3.25A (slim)(U300/U300s)	TBD
Slim 65W, LITEON 20V3.25A (slim)(U300/U300s)	TBD
Slim 65W 3pin, Delta 3pin ADP-65XB B 20V/3.25A Adapter (U400)	36200043
Slim 65W 2pin, Delta ADP-65XB A 20V/3.25A Adapter (U400)	36200019
Slim 65W 2pin, Liteon 2pinPA-1650-37LC20V3.25A Adapter (U400)	36200044

Power cords

A Lenovo IdeaPad power cord for a specific country or region is usually available only in that country or region:

U300/U300s

Table 14. Parts list—3-pin power cords

Region	P/N
CCC 3PIN • SSD YD-118-1+IEC53RVV+SSD-3-2B-1 1m	145000602
CCC 3PIN • LINETEK PC323+RVV300/300+LS15 1m	145000600
Argentina 3PIN • LINETEK LS15+H03VV-F+LP39 1m	145000599
Danmark 3PIN • LINETEK LS15+H03VV-F+LP-38 1m	145000598
Switzerland 3PIN • LINETEK LS15+H03VV-F+LP-37 1m	145000597
Brazil 3PIN • LINETEK LS15 H03VV-F LP26A 1m	145000596
Israel 3PIN • LINETEK LS15+H03VV-F+LP-41 1m	145000595
UL 3PIN • LINETEK LP-30B + SPT-2 + LS15 1m	145000594
UK 3PIN • LINETEK LP-61L+ H03VV-F+ LS15 1m	145000593
Indian 3PIN • LINETEK PE-361+ H05VV-F+ LS15 1m	145000592
Italy 3PIN • LINETEK LS15+H03VV-F+PE-336 1m	145000591
Korea 3PIN • LINETEK LS15+H05VV-F+LP-E04A 1m	145000590
Australia 3PIN • LINETEK LS15+H03VV-F+LP-23A 1m	145000589
Taiwan3PIN • LINETEK LS15+VCTF+LP-53 1m	145000588
Japan 3PIN • LINETEK LS15+VCTF+LP-54 1m	145000587
Africa 3PIN • LINETEK LS15+H03VV-F+PE-364 1m	145000586
CE 3PIN • LINETEK LP-34+H03VV-F+LS15 1m	145000585
CCC 3PIN • VOLEX GB10S3+RVV 300/500+VAC5S 1m	145000538
UL 3PIN • Volex US15S3+SPT-2+VAC5S 1m	145000537
UK 3PIN • VOLEX MP5004+H03VV-F+VAC5S 1m	145000605

Table 14. Parts list—3-pin power cords (continued)

Region	P/N
Indian 3PIN • VOLEX IA6A3+IS694+VAC5S 1m	145000536
Switzerland 3PIN • VOLEX MP232+H03VV-F+VAC5S 1m	145000524
Italy 3PIN • VOLEX IT10S3+HO3VV-F+VAC5S 1m	145000535
Denmark 3PIN • VOLEX MP233D+H03VV-F+VAC5S 1m	145000534
Korea 3PIN • VOLEX M2511+KETI IEC+VAC5S 1m	145000533
Australia 3PIN • VOLEX AU10S3+H03VV-F+VAC5S 1m	145000532
Taiwan3PIN • VOLEX TW15CS3+VCTF+VAC5S 1m	145000531
Japan 3PIN • VOLEX VAC5S+VCTF+M755 1m	145000530
Argentina 3PIN • VOLEX VA2073+H03VV-F+VAC5S 1m	145000528
Brazil 3PIN • VOLEX CH10S3+H03VV-F+VAC5S 1m	145000527
Israel 3PIN • VOLEX SI16S3+H03VV-F+VAC5S 1m	145000526
CE 3PIN • VOLEX M2511+HO3VV-F+VAC5S 1m	145000525
CCC 3PIN • Longwell LSG-31+RVV300/300+LS-18 1m	145000568
Argentina 3PIN • Longwell LP-24+H03VV-F+LS-18 1m	145000567
Danmark 3PIN • Longwell LP-40+H03VV-F+LS-18 1m	145000566
Switzerland 3PIN • Longwell LP-37+H03VV-F+LS-18 1m	145000565
Brazil 3PIN • Longwell LP-46+H03VV-F+LS-18 1m	145000564
Israel 3PIN • Longwell LP-41+H03VV-F+LS-18 1m	145000563
UL 3PIN • Longwell LP-30B+SPT-2 18AWG+LS-18 1m	145000562
UK 3PIN • Longwell LP-61L+H03VV-F+LS-18 1m	145000561
Indian 3PIN • Longwell LP-67+BIS+LS-18 1m	145000560
Italy 3PIN • Longwell LP-22+H03VV-F+LS-18 1m	145000559

Table 14. Parts list—3-pin power cords (continued)

Region	P/N
Korea 3PIN • Longwell LP-486+KTLH03VV-F+LS-5 1m	145000558
Australia 3PIN • Longwell LP-23A+LFC-3R+LS-18 1m	145000557
Taiwan3PIN • Longwell LP-71+VCTF+LS-33 1m	145000556
Japan 3PIN • Longwell LP-54+VCTF+LS-18 1m	145000555
Africa 3PIN • Longwell LP-39+H03VV-F+LS-18 1m	145000554
CE 3PIN • Longwell LP-34A+H03VV-F+LS-18 1m	145000553

Table 15. Parts list—2-pin power cords

Region	P/N
CCC 2PIN • 1m power cord	TBD
Argentina 2PIN • 1m power cord	TBD
Danmark 2PIN • 1m power cord	TBD
Switzerland 2PIN • 1m power cord	TBD
Brazil 2PIN • 1m power cord	TBD
Israel 2PIN • 1m power cord	TBD
UL 2PIN • 1m power cord	TBD
UK 2PIN • 1m power cord	TBD
Indian 2PIN • 1m power cord	TBD
Italy 2PIN • 1m power cord	TBD
Korea 2PIN • 1m power cord	TBD
Australia 2PIN • 1m power cord	TBD
Taiwan2PIN • 1m power cord	TBD
Japan 2PIN • 1m power cord	TBD
Africa 2PIN • 1m power cord	TBD
CE 2PIN • 1m power cord	TBD
CCC 2PIN • 1m power cord	TBD
Argentina 2PIN • 1m power cord	TBD
Danmark 2PIN • 1m power cord	TBD
Switzerland 2PIN • 1m power cord	TBD
Brazil 2PIN • 1m power cord	TBD
Israel 2PIN • 1m power cord	TBD

Table 15. Parts list—2-pin power cords (continued)

Region	P/N
UL 2PIN • 1m power cord	TBD
UK 2PIN • 1m power cord	TBD
Indian 2PIN • 1m power cord	TBD
Italy 2PIN • 1m power cord	TBD
Korea 2PIN • 1m power cord	TBD
Australia 2PIN • 1m power cord	TBD
Taiwan2PIN • 1m power cord	TBD
Japan 2PIN • 1m power cord	TBD
Africa 2PIN • 1m power cord	TBD
CE 2PIN • 1m power cord	TBD

U400

Table 16. Parts list—3-pin power cords

Region	P/N
India 3pin • VOLEX IA6A3+IS694+VAC5S 1m	145000536
Japan 3pin • LINETEK LS15+VCTF+LP-54 1m	145000587
Japan 3pin • Longwell LP-54+VCTF+LS-18 1m	145000555
Japan 3pin • VOLEX VAC5S+VCTF+M755 1m	145000530
ANZ 3pin • LINETEK LS15+H03VV-F+LP-23A 1m	145000589
ANZ 3pin • Longwell LP-23A+LFC-3R+LS-18 1m	145000557
ANZ 3pin • VOLEX AU10S3+H03VV-F+VAC5S 1m	145000532
TW 3pin • LINETEK LS15+VCTF+LP-53 1m	145000588
TW 3pin • Longwell LP-71+VCTF+LS-33 1m	145000556
TW 3pin • VOLEX TW15CS3+VCTF+VAC5S 1m	145000531
Korea 3pin • LINETEK LS15+H05VV-F+LP-E04A 1m	145000590
Korea 3pin • Longwell LP-486+KTLH03VV-F+LS-5 1m	145000558
Korea 3pin • VOLEX M2511+KETI IEC+VAC5S 1m	145000533
Italy 3pin • LINETEK LS15+H03VV-F+PE-336 1m	145000591
Italy 3pin • Longwell LP-22+H03VV-F+LS-18 1m	145000559
Italy 3pin • VOLEX IT10S3+HO3VV-F+VAC5S 1m	145000535
SA 3pin • LINETEK LS15+H03VV-F+PE-364 1m	145000586
SA 3pin • Longwell LP-39+H03VV-F+LS-18 1m	145000554
SA 3pin • VOLEX SA16A+HO3VV-F+VAC5S 1m	145000529
Brazil 3pin • LINETEK LS15 H03VV-F LP26A 1m	145000596
Brazil 3pin • Longwell LP-46+H03VV-F+LS-18 1m	145000564
Brazil 3pin • VOLEX CH10S3+H03VV-F+VAC5S 1m	145000527

Table 16. Parts list—3-pin power cords (continued)

Region	P/N
Israel 3pin • LINETEK LS15+H03VV-F+LP-41 1m	145000595
Israel 3pin • Longwell LP-41+H03VV-F+LS-18 1m	145000563
Israel 3pin • VOLEX SI16S3+H03VV-F+VAC5S 1m	145000526
Switzerland 3pin • LINETEK LS15+H03VV-F+LP-37 1m	145000597
Switzerland 3pin • Longwell LP-37+H03VV-F+LS-18 1m	145000565
Switzerland 3pin • VOLEX MP232+H03VV-F+VAC5S 1m	145000524
Danmark 3pin • LINETEK LS15+H03VV-F+LP-38 1m	145000598
Danmark 3pin • Longwell LP-40+H03VV-F+LS-18 1m	145000566
Danmark 3pin • VOLEX MP233D+H03VV-F+VAC5S 1m	145000534
Argentina 3pin • LINETEK LS15+H03VV-F+LP39 1m	145000599
Argentina 3pin • Longwell LP-24+H03VV-F+LS-18 1m	145000567
Argentina 3pin • VOLEX VA2073+H03VV-F+VAC5S 1m	145000528
CCC 2pin • LINETEK PC205+RVV 0.75/2C+COC03 1m	145500018
ARGENTINA 2pin • LINETEK LP40+H03VVH2-F+LS7H 1m	145500030
BRAZIL 2pin • LINETEK LP25+H03VVH2-F+LS7H 1m	145500028
ISRAEL 2pin • LINETEK LP45+H03VV-F+LS7 1m	145500029
UL 2pin • LINETEK LP5+SPT-2 #18/2C+ LS7C 1m	145500021
UK 2pin • LINETEK LP61L+H03VVH2-F+ LS7H 1m	145500019
Indian 2pin • LINETEK LP28+IS:694 0.75/2C+ LS7H 1m	145500020
Korea 2pin • LINETEK LPE03A+H03VVH2-F+LS7 1m	145500025
Australia 2pin • LINETEK LP15A+H03VVH2-F+LS7 1m	145500023
Taiwan 2pin • LINETEK LP51A+VCTFK 0.75/2C+LS7J 1m	145500027

Table 17. Parts list—2-pin power cords

Region	P/N
Japan 2pin • LINETEK LP51A+HVCTFK 0.75/2C+LS7J 1m	145500026
Africa 2pin • LINETEK PE364("O")+H03VVH2-F+LS7H 1m	145500024
CE 2pin • LINETEK LP21+H03VVH2-F+ LS7 1m	145500022

Notices

Lenovo may not offer the products, services, or features discussed in this document in all countries. Consult your local Lenovo representative for information on the products and services currently available in your area. Any reference to a Lenovo product, program, or service is not intended to state or imply that only that Lenovo product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any Lenovo intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any other product, program, or service.

Lenovo may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not give you any license to these patents.

LENOVO GROUP LTD. PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some jurisdictions do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. Lenovo may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

The products described in this document are not intended for use in implantation or other life support applications where malfunction may result in injury or death to persons. The information contained in this document does not affect or change Lenovo product specifications or warranties. Nothing in this document shall operate as an express or implied license or indemnity under the intellectual property rights of Lenovo or third parties. All information contained in this document was obtained in specific environments and is presented as an illustration. The result obtained in other operating environments may vary.

Lenovo may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Any references in this publication to non-Lenovo Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this Lenovo product, and use of those Web sites is at your own risk.

Any performance data contained herein was determined in a controlled environment. Therefore, the result obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Trademarks

The following terms are either registered trademarks or trademarks of Lenovo in the United States and/or other countries:

Lenovo®
Lenovo logo®
IdeaPad®
VeriFace®
OneKey Rescue®(OneKey Recovery, OneKey Antivirus)
APS®
Power Express®
Energy Management and ReadyComm®

The following terms are trademarks of Microsoft Corporation in the United States, other countries, or both:

Windows®
Windows Vista®
Windows® 7

The following are trademarks of Intel Corporation or its subsidiaries in the United States, other countries, or both:

Intel®
Intel® Core™ 2 Duo

Other company, product, or service names may be the trademarks or service marks of others.